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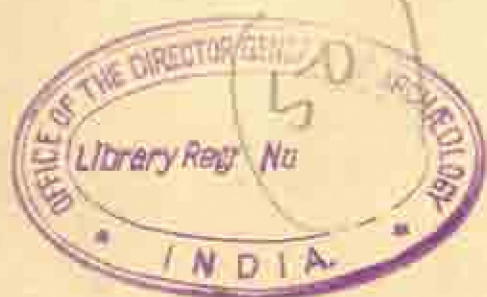
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THE JOURNAL
OF
HELLENIC STUDIES



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THE SOCIETY FOR THE PROMOTION OF HELLENIC STUDIES

THE JOURNAL OF HELLENIC STUDIES

25985

VOLUME XXXIX. (1919)

938.005
J. H. S.



PUBLISHED BY THE COUNCIL AND SOLD ON THEIR BEHALF

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The Society for the Promotion of Roman Studies.

19 BLOOMSBURY SQUARE, LONDON, W.C. 1

President: PROFESSOR J. S. REID, Esq.

The Society embraces the history, art and archaeology of Rome, Italy and the Roman Empire, down to about A.D. 700.

In connection with the Historic Society, the Roman Society maintains a joint library of Greek and Roman art, archaeology and history, and a collection of lantern slides and photographs. Members are entitled to borrow books and slides, and these can be sent through the post.

Communications respecting books and slides should be made to the Librarian.

Afternoon meetings for the reading and discussion of papers are held at Burlington House, Piccadilly, W. Notices of these are sent to all members.

Annual Subscription one guinea. Life membership commutable for persons over fifty years of age ten guineas, for others fifteen guineas. There is at present no entrance fee.

Persons desirous of joining the Society are asked to communicate with the Secretary.

THE JOURNAL OF ROMAN STUDIES (1883) is now published by the Society in half-yearly parts, and runs post free to all members. Vols. I-V include papers by English, American, French, and Italian scholars, and, amongst others:—

Anderson, J. G. G. The Quinquagesima Nereida.
Anderson, J. G. G. Excavations of the Aqueduct.
Addy, Thomas. Recent Excavations at Oculi.
Baker, Miss E. R. The Catacombs of St. Callixtus.
Baker, Miss E. R. Recent discoveries on the Palatine Hill.
Cairns, W. M. Roman Inscriptions in Asia Minor.
Champlin, G. L. The family of the Caesars.
Crawford, Prof. and Anderson, J. G. G. Three new inscriptions.
Curtis, J. Roman and Native coinage in Calcedonia.
Dunbar, Prof. A Roman Senator under Domitian and Trajan.
Eadell, Mrs. A statue in the Palazzo Barberini.
Gardner, R. The Via Claudia Nova.
Hartley, E. G. Nubia Insula Populi on Capital Charges.
Haverfield, Prof. Roman London.

Haverfield, Prof. and Stuart Jones, H. Romano-British Art.
Maddison, G. The Cerebrus Gold Coins.
Mackail, J. W. Virgil and Roman Studies.
Miles-Cook, Miss P. E. The paintings of the Villa Igea at Pompeii.
Reinach, Salomon. A Bronze Statuette of Zenon.
Reid, Prof. J. S. Roman Public Law.
Reid, Prof. J. S. Roman Sacrifices at Rome.
Reid, Prof. J. S. Problems of the Second Punic War.
Strong, Mrs. S. A. The Archaeological Exhibition of 1911 at Rome.
Van Buren, A. W. The Ara Pacis Augustae.
Vossler, Prof. The Magna Mater.
Wardle Fowler, W. The original meaning of the word "Saturn".
Wardle Fowler, W. Mithras Pater.

Vol. VI (delayed by the war) is in active preparation.

THE CLASSICAL ASSOCIATION

The objects of the Classical Association are to promote the development and maintain the well-being of classical studies, and in particular (a) to impress upon public opinion the claim of such studies to an eminent place in the national scheme of education; (b) to improve the practice of classical teaching; (c) to encourage investigation and call attention to new discoveries; (d) to create opportunities for intercourse among lovers of classical learning.

Membership of the Association is open to men and women alike. The annual subscription is 5s. (life composition, £3 15s.), and there is an entrance fee of 5s. (not charged to Libraries). Members receive a copy of the annual *Proceedings* of the Association and of *The Year's Work in Classical Studies* (both post free). They may also obtain the *Classical Review* and *Classical Quarterly* at the reduced price of 7s. and 9s. 4 year respectively (post free), provided that the subscriptions be paid before January 31st in each year. Subscriptions sent in later than that date must be at the rates offered to the general public, viz., 7s. 6d. for the *Classical Review*, 12s. 6d. for the *Classical Quarterly*, or 18s. for the two Journals jointly, post free in each case.

Inquiries and applications for membership should be addressed either to the Hon. Treasurer, Mr. E. Norman Gardner, 2, The College, Epsom; or to either of the Hon. Secretaries, Professor Slater, 4, Chudcot Gardens, London, N.W. 3; and Professor Ure, University College, Reading; or to the Hon. Secretary of any of the district Branches—viz., Miss Hilda Livesey, 155, Oswald Road, Chorlton-cum-Hardy, Manchester; Miss M. W. U. Robertson, The University, Edmund Street, Birmingham; Mr. Kenneth Forbes, The University, Liverpool; Mr. E. P. Baker, 426, Woodborough Road, Nottingham; Miss Wilkinson, Badminton House, Clifton, Bristol; Mr. Basil Anderton, The Public Library, New Bridge Street, Newcastle-upon-Tyne; Miss E. Stradwick, M.A., City of London School for Girls, Carmelite Street, E.C. 4; Miss M. E. Pearson, University Registry, Cathays Park, Cardiff; Mr. P. W. Dodd, The University, Leeds; and Professor Dawson, Northcote House, Apollo Bander, Bombay.



RULES

OF THE

Society for the Promotion of Hellenic Studies.

I. THE objects of this Society shall be as follows:—

I. To advance the study of Greek language, literature, and art, and to illustrate the history of the Greek race in the ancient, Byzantine, and Neo-Hellenic periods, by the publication of memoirs and unedited documents or monuments in a Journal to be issued periodically.

II. To collect drawings, facsimiles, transcripts, plans, and photographs of Greek inscriptions, MSS., works of art, ancient sites and remains; and with this view to invite travellers to communicate to the Society notes or sketches of archaeological and topographical interest.

III. To organise means by which members of the Society may have increased facilities for visiting ancient sites and pursuing archaeological researches in countries which, at any time, have been the sites of Hellenic civilization.

2. The Society shall consist of a President, Vice-Presidents, a Council, a Treasurer, one or more Secretaries, 40 Hon. Members, and Ordinary Members. All officers of the Society shall be chosen from among its Members, and shall be *ex officio* members of the Council.

3. The President shall preside at all General, Ordinary, or Special Meetings of the Society, and of the Council or of any Committee at which he is present. In case of the absence of the President, one of the Vice-Presidents shall preside in his stead, and in the absence of the Vice-Presidents the Treasurer. In the absence of the Treasurer the Council or Committee shall appoint one of their Members to preside.

4. The funds and other property of the Society shall be administered and applied by the Council in such manner as they shall consider most conducive to the objects of the Society: in the Council shall also be vested the control of all publications issued by the Society, and the general management of all its affairs and concerns. The number of the Council shall not exceed fifty.

5. The Treasurer shall receive, on account of the Society, all subscriptions, donations, or other moneys accruing to the funds thereof, and shall make all payments ordered by the Council. All cheques shall be signed by the Treasurer and countersigned by the Secretary.

6. In the absence of the Treasurer the Council may direct that cheques may be signed by two members of Council and countersigned by the Secretary.

7. The Council shall meet as often as they may deem necessary for the despatch of business.

8. Due notice of every such Meeting shall be sent to each Member of the Council, by a summons signed by the Secretary.

9. Three Members of the Council, provided not more than one of the three present be a permanent officer of the Society, shall be a quorum.

10. All questions before the Council shall be determined by a majority of votes. The Chairman to have a casting vote.

11. The Council shall prepare an Annual Report, to be submitted to the Annual Meeting of the Society.

12. The Secretary shall give notice in writing to each Member of the Council of the ordinary days of meeting of the Council, and shall have authority to summon a Special and Extraordinary Meeting of the Council on a requisition signed by at least four Members of the Council.

13. Two Auditors, not being Members of the Council, shall be elected by the Society in each year.

14. A General Meeting of the Society shall be held in London in June of each year, when the Reports of the Council and of the Auditors shall be read, the Council, Officers, and Auditors for the ensuing year elected, and any other business recommended by the Council discussed and determined. Meetings of the Society for the reading of papers may be held at such times as the Council may fix, due notice being given to Members.

15. The President, Vice-Presidents, Treasurer, Secretaries, and Council shall be elected by the Members of the Society at the Annual Meeting.

16. The President shall be elected by the Members of the Society at the Annual Meeting for a period of five years, and shall not be immediately eligible for re-election.

17. The Vice-Presidents shall be elected by the Members of the Society at the Annual Meeting for a period of one year, after which they shall be eligible for re-election.

18. One-third of the Council shall retire every year, but the Members so retiring shall be eligible for re-election at the Annual Meeting.

19. The Treasurer and Secretaries shall hold their offices during the pleasure of the Council.

20. The elections of the Officers, Council, and Auditors, at the Annual Meeting, shall be by a majority of the votes of those present. The Chairman of the Meeting shall have a casting vote. The mode in which the vote shall be taken shall be determined by the President and Council.

21. Every Member of the Society shall be summoned to the Annual Meeting by notice issued at least one month before it is held.

22. All motions made at the Annual Meeting shall be in writing and shall be signed by the mover and seconder. No motion shall be submitted, unless notice of it has been given to the Secretary at least three weeks before the Annual Meeting.

23. Upon any vacancy in the Presidency occurring between the Annual Elections, one of the Vice-Presidents shall be elected by the Council to officiate as President until the next Annual Meeting.

24. All vacancies among the other Officers of the Society occurring between the same dates shall in like manner be provisionally filled up by the Council until the next Annual Meeting.

25. The names of all Candidates wishing to become Members of the Society shall be submitted to a Meeting of the Council, and at their next Meeting the Council shall proceed to the election of Candidates so proposed: no such election to be valid unless the Candidate receives the votes of the majority of those present.

26. The Annual Subscription of Members shall be one guinea, payable and due on the 1st of January each year; this annual subscription may be compounded for by a single payment of £15 15s., entitling compounders to be Members of the Society for life, without further payment. All Members elected on or after January 1, 1905, shall pay on election an entrance fee of two guineas.

27. The payment of the Annual Subscription, or of the Life Composition, entitles each Member to receive a copy of the ordinary publications of the Society.

28. When any Member of the Society shall be six months in arrear of his Annual Subscription, the Secretary or Treasurer shall remind him of the arrears due, and in case of non-payment thereof within six months after date of such notice, such defaulting Member shall cease to be a Member of the Society, unless the Council make an order to the contrary.

29. Members intending to leave the Society must send a formal notice of resignation to the Secretary on or before January 1; otherwise they will be held liable for the subscription for the current year.

30. If at any time there may appear cause for the expulsion of a Member of the Society, a Special Meeting of the Council shall be held to consider the case, and if at such Meeting at least two-thirds of the Members present shall concur in a resolution for the expulsion of such Member of the Society, the President shall submit the same for confirmation at a General Meeting of the Society specially summoned for this purpose, and if the decision of the Council be confirmed by a majority at the General Meeting, notice shall be given to that effect to the Member in question, who shall thereupon cease to be a Member of the Society.

31. The Council shall have power to nominate 40 British or Foreign Honorary Members. The number of British Honorary Members shall not exceed ten.

32. The Council may, at their discretion, elect for a period not exceeding five years Student-Associates, who shall be admitted to certain privileges of the Society.

33. The names of Candidates wishing to become Student-Associates shall be submitted to the Council in the manner prescribed for the Election of Members. Every Candidate shall also satisfy the Council by means of a certificate from his teacher, who must be a person occupying a recognised position in an educational body and be a Member of the Society, that he is a *bona fide* Student in subjects germane to the purposes of the Society.

34. The Annual Subscription of a Student-Associate shall be one guinea, payable and due on the 1st of January in each year. In case of non-payment the procedure prescribed for the case of a defaulting Ordinary Member shall be followed.

35. Student-Associates shall receive the Society's ordinary publications, and shall be entitled to attend the General and Ordinary Meetings, and to read in the Library. They shall not be entitled to borrow books from the Library, or to make use of the Loan Collection of Lantern Slides or to vote at the Society's Meetings.

36. A Student-Associate may at any time pay the Member's entrance fee of two guineas, and shall forthwith become an Ordinary Member.

37. Ladies shall be eligible as Ordinary Members or Student-Associates of the Society, and when elected shall be entitled to the same privileges as other Ordinary Members or Student-Associates.

38. No change shall be made in the Rules of the Society unless at least a fortnight before the Annual Meeting specific notice be given to every Member of the Society of the changes proposed.

REGULATIONS FOR THE USE OF THE LIBRARY

AT 19 BLOOMSBURY SQUARE, W.C.

(NOTE.—These Regulations are under Revision.)

I. THAT the Hellenic Library be administered by the Library Committee, which shall be composed of not less than four members, two of whom shall form a quorum.

II. That the custody and arrangement of the Library be in the hands of the Hon. Librarian and Librarian, subject to the control of the Committee, and in accordance with Regulations drawn up by the said Committee and approved by the Council.

III. That all books, periodicals, plans, photographs, &c., be received by the Hon. Librarian, Librarian or Secretary and reported to the Council at their next meeting.

IV. That every book or periodical sent to the Society be at once stamped with the Society's name.

V. That all the Society's books be entered in a Catalogue to be kept by the Librarian; and that in this Catalogue such books, &c., as are not to be lent out be specified.

VI. That, except at Christmas, Easter, and on Bank Holidays, the Library be accessible to Members on all week days from 10.30 A.M. to 5.30 P.M. (Saturdays, 10 A.M. to 1 P.M.), when either the Librarian, or in his absence some responsible person, shall be in attendance. Until further notice, however, the Library shall be closed for the vacation for August and the first week of September.

VII. That the Society's books (with exceptions hereinafter to be specified) be lent to Members under the following conditions:—

- (1) That the number of volumes lent at any one time to each Member shall not exceed three; but Members belonging both to this Society and to the Roman Society may borrow six volumes at one time.
- (2) That the time during which such book or books may be kept shall not exceed one month.
- (3) That no books, except under special circumstances, be sent beyond the limits of the United Kingdom.

VIII. That the manner in which books are lent shall be as follows:—

- (1) That all requests for the loan of books be addressed to the Librarian.
- (2) That the Librarian shall record all such requests, and lend out the books in the order of application.
- (3) That in each case the name of the book and of the borrower be inscribed, with the date, in a special register to be kept by the Librarian.
- (4) Should a book not be returned within the period specified, the Librarian may reclaim it.

(5) All expenses of carriage to and fro shall be borne by the borrower.

(6) All books are due for return to the Library before the summer vacation.

IX. That no book falling under the following categories be lent out except by special authority:—

- (1) Unbound books.
- (2) Detached plates, plans, photographs, and the like.
- (3) Books considered too valuable for transmission.
- (4) New books within one month of their coming into the Library.

X. That new books may be borrowed for one week only, if they have been more than one month and less than three months in the Library.

XI. That in the case of a book being kept beyond the stated time the borrower be liable to a payment of one shilling for each week after application has been made by the Librarian for its return, and if a book is lost the borrower be bound to replace it.

XII. That the following be the Rules defining the position and privileges of Subscribing Libraries:—

- a. Libraries of Public and Educational Institutions desiring to subscribe to the *Journal* are entitled to receive the *Journal* for an annual subscription of One Guinea, without Entrance Fee, payable in January of each year, provided that official application for the privilege is made by the Librarian to the Secretary of the Society.
- b. Subscribing Libraries, or the Librarians, are permitted the use of the Library and Slide Collections on the same conditions as Members.
- c. A Librarian, if he so desires, may receive notices of meetings and may attend meetings, but is not entitled to vote on questions of private business.

The Library Committee

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Applications for books and letters relating to the Photographic Collections, and Lantern Slides, should be addressed to the Librarian, at 19 Bloomsbury Square, W.C. 1.

THE SOCIETY FOR THE PROMOTION OF HELLENIC STUDIES.

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PROCEEDINGS

SESSION 1918-1919

During the past Session the following Papers were read at General Meetings of the Society :—

November 12th, 1918. Mr. A. Hamilton Smith: *The Temporary War-time Exhibition of the British Museum* (see below, p. xx).

February 11th, 1919. Professor Percy Gardner: *A Bronze Head of Polydeitan Style* (*J.H.S.* xxxix. pp. 69 *sqq.*).

May 8th, 1919. Mr. D. S. Robertson: *A Greek Carnival* (*J.H.S.* xxxix. pp. 110 *sqq.*).

Mr. J. T. Sheppard: *Admetus, Verrall, and Professor Myres* (*J.H.S.* xxxix. pp. 37 *sqq.*).

June 24th, 1919. Mr. Stanley Casson: *Antiquities discovered on the Salonika Front* (see below, p. xxviii).

THE ANNUAL MEETING was held at Burlington House on June 24th, 1919, Dr. Walter Leaf, President of the Society, in the Chair.

The President announced the election of Sir F. G. Kenyon, K.C.B., D.Litt., P.B.A., as President of the Society, and the re-election of the Vice-Presidents, Officials and retiring Members of Council of whose names a printed list had been circulated.

Mr. George A. Macmillan, Hon. Secretary, presented the following Annual Report of the Council :—

THE Council beg leave to submit the following Report for the Session 1918-19.

Since the last Annual Meeting the nation has passed through a period of intense anxiety, ending in the exultation of victory and followed by a natural reaction after the strain of over four years' continuous fighting.

The work of reorganizing the national life has proved more complicated than was anticipated, demobilisation both of men and of materials proceeds but slowly, and many of the Society's Members have not yet resumed their normal occupations. The Council felt that in these circumstances it was wiser to wait awhile and take breath before attacking their own particular problem

of reconstructing and of making good the losses caused by the war. They have therefore no fresh developments to report: there has been no further response to their appeal for records of travel during the 18th and 19th centuries. Undoubtedly many collections of such records exist: the recent discovery of the original drawings made by Adam Buck for a projected publication of Greek vases proves this, and the Council hope that Members will not forget the importance of saving such documents from destruction, even when they have no money value. There is another class of records, also of great value, but of recent date, for which an appeal has been made by the Archaeological Joint Committee, namely notes, sketches and photographs made by those on active service especially in the Near East, the Levant and Mesopotamia. The Council desire to emphasize the importance of such memoranda, if only as signposts to guide scientific examination at a later date.

The thanks of the Society are again due to Mr. G. F. Hill and to Miss C. A. Hutton for voluntary work in editing the *Journal* and managing the Library during the continued absence of Captain E. J. Forsdyke and Mr. John Penoyre. Captain Forsdyke will shortly be demobilised, and when he returns to his work at the British Museum will resume his editorial duties. The *Journal* will this year once more be published in two parts, but both will be issued together as one volume. In this way an appreciable sum is saved in packing, etc.

Mr. Penoyre severed his connexion with Lady Roberts' Field Glass Fund in April, and at the same time closed his own organization for the supply of comforts to H.M. Forces in the field. His health has suffered severely from over-fatigue, and as Miss Hutton is able to remain in charge of the office work until after the Summer Vacation the Council have given Mr. Penoyre leave of absence until September. When F. Wise is demobilised he will return to his post in the Library, and it is hoped that by the autumn it will again be open in the middle of the day.

Changes on the Council, etc.—By the death of Sir John Mahaffy, Provost of Trinity College, Dublin, the Society has lost one of the fast diminishing number of its original founders, and a scholar who, by his long series of books on Greek History, Literature and Antiquities, had done much to promote the objects which the Society has always had in view. By his masterly edition of the 'Petrie Papyri' he had also made his mark in the cognate field of Egyptology. The death roll for the past year also includes the names of Dr. Edwin Freshfield, Sir Hermann Weber, Sir Edward Fry, the Rev. E. C. Selwyn, of an American scholar, Professor Lloyd Andrews, and of Lieut. A. C. Eaton (8th Batt. Bedfordshire Regt.) killed in action.

The President of the Society, Dr. Walter Leaf, retires this year on the expiration of his term of office, and the Council desire to place on record their appreciation of the valuable work which he has done for the Society. His tenure of office has coincided with the duration of the war, a period

very bare of humanistic interest but full of urgent national claims on his powers. The Council hope that as these lessen he will find time for the edition of Strabo projected before the war, the lighter side of which has formed the subject of two of his interesting Presidential addresses.

The Council has pleasure in nominating Sir Frederic Kenyon, Director of the British Museum, for the vacant office of President.

No additions to the number of Vice-Presidents are recommended this year, nor any changes on the Council. The following members retire by rotation and being eligible, are nominated for re-election:—Messrs. A. M. Daniel, R. M. Dawkins, J. P. Droop, C. C. Edgar, Talfourd Ely, T. Eyle, P. N. Ure, Miss J. E. Harrison, Mrs. Arthur Strong.

The Hon. Secretary, Mr. George Macmillan, who has acted in that capacity since the foundation of the Society forty years ago (the Inaugural Meeting was held on June 19th, 1879), has intimated his desire to be relieved of his office as soon as a suitable successor can be found. The Council have received this intimation with the deepest regret. Mr. Macmillan's services to the Society have been invaluable; it is hardly too much to say that it is to him more than to any man that the Society owes its continued prosperity and even its existence. After Mr. Macmillan's forty years of continuous work, the Council feel that they have no right to refuse his request, but they are glad to think that he has consented to continue in office for the present, and that for the moment it is not necessary for them to appoint his successor.

Archaeological Joint Committee.—The Council nominated two representatives (Mr. A. H. Smith and Mr. G. F. Hill) to serve on the Archaeological Joint Committee, formed at the invitation of the Foreign Office by the British Academy in conjunction with the leading archaeological Societies, to deliberate on questions connected with the antiquities of the countries in the Near East which have been opened up by the War. The efforts of the Committee have been directed mainly towards procuring improved legislation on antiquities in the countries affected, especially with a view to interesting the people in their preservation and to modifying the harsh and repressive provisions of existing laws, the chief result of which is to encourage destruction and smuggling. A draft of the general principles which should be observed in such legislation was presented to the British and American Delegations at the Peace Conference, in the hope that they might be accepted by the League of Nations and enforced in the Peace Treaty with Turkey, and that all nations who should receive mandates to govern portions of the former Turkish Empire might be required by the League to conform to them; and a modification of this draft containing all its essential provisions, was adopted by an International Committee in Paris to the same end. How far it will be incorporated in the Peace Treaty is not yet known. The Committee's further recommendation that the antiquities of the countries which will remain under Turkish rule should be administered by an International

Commission was not considered feasible by the International Committee. A second piece of work, the drafting in full detail of a Law of Antiquities for Palestine, was undertaken at the request of the Governor of Jerusalem. This has been completed, and the draft, it is believed, has been found acceptable in all essentials and will in time become law; it is hoped that the Law for other lands to be controlled by Great Britain may be drawn on the same lines. Thirdly, the Committee has made arrangements for the collection of records of all kinds relating to antiquities in the countries with which it is concerned; the results of the appeal for such records have so far not been great, but are likely to increase as time goes on. The Hellenic Society will be the natural depository for records relating to Greek antiquities collected by the Committee. Finally, it is necessary to record a failure. The Committee's appeal to the Government to endow a British Institute of Archaeology in Egypt has met with a refusal, on the ground of the critical condition of Imperial finances at the present time. It is needless to add that the Committee intends to renew its efforts in this direction when circumstances appear to be more favourable.

General Meetings.—Three General Meetings have been held during the past Session.

At the first Meeting, held on November 12th, 1918, Mr. A. Hamilton Smith read a paper, illustrated by lantern slides, on 'The Temporary War-time Exhibition of the British Museum.' Mr. Smith explained that this exhibition was primarily intended to give our overseas visitors some idea of the treasures of the Museum, but as all the more important of these had been placed in safety, recourse was had as far as possible to casts; for this purpose they had used the *mudre forme*, or stock casts made of every suitable object in the Museum. In this way an exhibition of the Elgin marbles was arranged, and the illusion was much helped by the skilful way in which the casts had been painted over the protecting varnish. One of the slides showed a view of the Elgin Room with the metopes encased in asbestos packing, as they were built into the wall and could not be moved. At the North end of the room were arranged cases containing selections of Minoan objects, ancient armour, Greek vases, objects used in daily life, and a long series of electrotypes of coins. An exhibition of busts, and of reliefs, etc. connected with Roman warfare was placed in another gallery, and the Grenville Library was devoted to books, drawings, and papers of special interest to the overseas soldiers. Mr. Smith added that over 2000 people visited the Museum on August 3rd, the first day on which the exhibition was open, and that there had been a continuous stream of visitors ever since.

At the second meeting held on February 11th, 1919, Professor Percy Gardner read a paper illustrated by lantern slides, on "A Bronze Head of Polycletan Style," a recent gift to the Ashmolean Museum. An interesting discussion followed the paper, which will be published in the forth-

coming volume of the *Journal*. Professor Gardner was warmly congratulated on this beautiful addition to the Ashmolean Museum. At the third meeting held on May 18th, papers were read by Mr. D. S. Robertson, on "A Greek Carnival," and by Mr. J. T. Sheppard on "Admetus, Verrall, and Professor Myres." Both papers will be published in the next volume of the *Journal*.

Library, Photographic and Lantern Slide Collections.—The number of visitors to the Library during the past year was 539, the number of books borrowed, 531. One hundred and four books and pamphlets have been added during the year; most of these are gifts, as the Library Grant was suspended at the beginning of the war. Among these gifts special mention should be made of several volumes of early travel in the Levant, of a set of excerpts presented by Mr. G. F. Hill, and of a copy, complete to date, of the illustrated publication of the contents of the National Museum at Athens.

The Council acknowledge with thanks gifts of books from H.M. Government of India, the Trustees of the British Museum, the Ministry of Reconstruction, the Svenska Humanistisk Förbundung of Upsala, and the following donors: M. Andreades, Mr. W. H. Buckler, the Misses Bulwer, Admiral Sir R. Costance, G.C.B., Mrs. Arundell Esdaile, Miss Joan Evans, Capt. E. J. Forsdyke, Mr. E. R. Garnsey, Dr. Granville, Dr. A. W. de Groot, Mr. F. W. Hasluck, M. B. Haussoullier, Mr. G. F. Hill, Mr. J. C. Hoppin, M. K. J. Johansen, Sir F. G. Kenyon, Mr. J. G. Milne, M. Remantas, Prof. Rhys Roberts, Dr. A. G. Roos, M. A. Six, Dr. Parkes Weber, and M. Zacharias.

The following publishers have also presented copies of recently published works: Messrs. George Allen & Unwin, E. Arnold, R. H. Blackwell, The Faith Press, The Gresham Publishing Co., Messrs. Longmans, Green & Co., Methuen & Co., Mr. Humphrey Milford, and the University Presses of Oxford and Cambridge, and of Chicago and Yale.

The number of slides borrowed during the past session is 1327, a slight increase on the figures for last year; the number purchased is 359, nearly three times as many; these include two large orders for S. Africa and the United States. Owing to the continued increase in the cost of materials it has been necessary to raise the price of slides purchased. The cost of these, however, remains considerably less than the current price.

The Council desire to express their special thanks to the Hon. Margaret Wyndham and to Capt. S. Casson for large collections of photographs to the Royal Numismatic Society for a generous gift of slides and negatives, also to Mr. Dundas, Mr. F. W. Hasluck, Mr. G. F. Hill, and Mr. Arthur Smith for further gifts of slides, etc.

Finance.—As was foreshadowed in the last report it has been decided to close the accounts each year at December 31st instead of the end of May as heretofore, and the accounts now presented, therefore, cover only the

seven months from June 1st to December 31st, 1918. By making up the accounts annually at this time it will be possible in future to present a more accurate statement than was the case under the old system, although for the current year the figures are necessarily incomplete.

So far as the present statement is concerned there is nothing of special interest to mention. The expenditure has been kept down to the lowest possible point, but in spite of this, and the saving gained by issuing the *Journal* in one complete volume for the year there is a deficit on the Income and Expenditure account, and, so far as can at present be seen, the current year will also show a considerable deficit.

The Council are now compelled to look ahead, and as far as possible consider whether it will be possible in the near future to resume all the Society's activities on the same scale as before the war. During the past four years the Library grant has been suspended, but if the Library is to be as useful to members in the future as it has been in the past the grant must be renewed and an effort made to overtake the arrears which have accumulated during the war. In this connexion it must be borne in mind that books are much more expensive, and that with the cost of labour and materials as at present the *Journal* will cost more than twice as much as in pre-war days. When it is remembered in addition to this that the revenue from subscriptions is nearly £150 less, the financial outlook for the future might be regarded as difficult. It is hoped, however, that the advent of peace will see an increase of interest in the objects and work of the Society, and a considerable addition to the membership roll. The high-water mark was reached a few years ago when the list ran to about 950 names. The number now on the books is about 800, and unless the work of the Society is to be considerably restricted it is essential that the fall in membership should be made up immediately and the number of a few years ago exceeded in the near future. This can be achieved only by the active assistance of members in introducing candidates from among their friends. During the last twelve months some twenty new members have been elected, which is very encouraging in view of the difficulties of the time, and the Council believe that with the co-operation of the members in this direction the financial difficulties will be overcome.

In presenting the report MR. MACMILLAN took occasion to refer to the death of Sir John Mahaffy, one of the Founder Members of the Society. He also referred to the services rendered to the Society during his term of office by the retiring President, Dr. Leaf, not the least of which were the inspiring addresses to which they had been privileged to listen at the Annual Meetings.

Mr. Macmillan concluded by drawing attention to the request of the Archaeological Joint Committee for drawings, photographs and notes made by Members who had been serving in the Near East and Mesopotamia.

The President then delivered the following address:—

The time has come for me, at the expiration of my term of office, to resign into more capable hands the Presidency of this Society with which you so generously invested me five years ago. I retire with the sense of the profoundest gratitude both to the Society and to the officers and Council with whom it has been my privilege to work. One name in particular you will allow me to mention specially on this occasion, that of one of my oldest friends, our Honorary Secretary, Mr. Geo. Macmillan. You will see by the Report that he has expressed a wish to be relieved of the office which he has so ably filled for forty years. He is one of the few remaining original members of the Society; he has been its first and only Honorary Secretary. Only those who have served on the Council can fully appreciate the debt which we owe to him and his devotion to our interests for all this time. Presidents come and go; but he has survived them all; he, more than any man, has not only seen the Society into the world, but has fostered and guided it by his business capacity and his enthusiasm for all that is meant by Hellenism. The Society can hardly seem the same without him at his post. He has indeed earned the right to be *rule donatus*; but we are all glad to know that he does not press his resignation at the moment. We all cherish the hope that his natural affection for what he may fairly regard as his own offspring may yet nerve his heart for further service.

My own term of office has exactly coincided with the duration of the war. Elected on June 23, 1914, the very day of the Sarajevo assassinations, I retire on the day which assures the definitive conclusion of peace.

It has indeed been an anxious period; and our efforts, always under the shadow of the great preoccupation, have been directed to holding the ground which the Society has won through more than thirty years of work, as the focus of Greek studies in Great Britain. In that at least I hope that we have succeeded. We have at least maintained the two chief functions by which we energise, our meetings and our Journal; and I hope we may justly claim that we have maintained them at a level worthy of our past tradition. The Editors of the Journal will, I am sure, support me when I say that the difficulty they have had to face has not been that of any lack either in the quantity or quality of the contributions available; what they have had to struggle with has been the purely external and material obstacle of lack of paper, with the other troubles incidental to the universal rise in cost of publication. We have handed on our inheritance undiminished, and save for allusions in our Reports our successors will see no faltering in the work which we have been able to produce and place on record during the vicissitudes of the tremendous struggle. I am not sure that they may not even see an enhancement of effort. The great outburst of energy which the war has called forth has, if I mistake not, shown itself in increased production even in fields remote from the war; the stimulus given to mechanical output has extended itself with sympathetic intensity to intellectual effort; and has brought about, not a jaded lassitude, but a redoubled activity in literary and scientific fertility of thought. It has certainly extended the general belief not only in education but in research; we have found that we can do far more than we ever believed possible, industrially and mentally alike. The intellectual standard has I think, been raised; our task is to see that it is not again lowered, and to establish irrevocably the step which has been taken towards the evolution of the superman. We are in the throes and the pangs are distressing; but I feel that there is new life to come. And I have never lost my confidence that in that new life our own Hellenic studies will assert the position that belongs to them of right.

To me at all events Hellenism has never been more precious or more sustaining than during the last five years. The affairs with which I have had to deal have been anxious and often trying; I doubt if I could have got through them had I not had the resource of Greek life and thought to which I could turn for relief. You

will, I hope, excuse me for this personal testimony to Hellenism; I feel sure that there are many others who will be able to say the same. While this is true, Hellenism will assure its own future.

But if Hellenism is to assert itself, as I believe, it must not be content with merely holding its ground; it must give proof of vitality by fresh methods of research. It must recognise the new age by boldly scrapping so much of its present capital as is worn out. It needs at once new materials and new ways of thought. It must not be a back eddy beside the main current of contemporary thought; it must contribute its affluent, or it will be drained dry to make room for something else. Historical Science in the wide sense has taken its place in moulding the course of the war; it is at the moment still more actively and closely employed in moulding the peace. Hellenists must claim the right of Greek thought to be at the foundation of history; and they have to show how it is still living. The old idea that Hellenism was a miraculous product, self-generated, blossoming into its full and dazzling bloom in a couple of centuries to perish in another two, a department of human history which could be treated by itself as a piece of pure art or at best a beautiful museum—that idea has indeed passed away. But it has left its effects behind it, and the methods with which it was discussed and analysed are still working, with a sap like that of a decaying body, to poison where it once nourished.

Will you allow me to turn for a moment to my own special subject, Homer. A right understanding of the oldest Greek document is evidently of paramount importance to our comprehension of all Greek history. It is the best link in our possession between Hellenic civilisation and the older worlds of high culture which have been revealed in Greece, at Troy, and above all in Crete. The nineteenth century made great efforts and realised great advances towards a right understanding; but a new phase has opened; and in my opinion the methods of the nineteenth century are now obsolete and harmful. I have used them and believed in them for a time; but for nearly twenty years now I have lost all interest in the old controversies, and have endeavoured to turn my steps into new paths. The problem of the composition of the *Iliad* has proved insoluble by any analysis which the nineteenth century could invent. If it is ever to be solved I believe that it will be overcome not by a frontal attack, but as an incident of some outflanking movement. The most promising outlook at the moment lies, I think, in a combination of geography with archaeology.

This is the line which I have endeavoured to take, led to it, as I hasten to add by M. Victor Bérard and Sir William Ramsay. All that I can hope to have done is to have pushed a little way along it; but I believe that, in better hands than mine, it will prove profitable. Whether I am right or wrong in the conclusions I have drawn matters not a jot, any more than it matters that in my opinion Bérard's conclusions are wrong. That does not affect the method, nor the debt which I acknowledge to my predecessors. Where I believe we are right is in trying to confront Homer with facts, instead of wasting our time in wire-drawn hypotheses which can be proved and disproved with equal confidence and cagency. And the method needs to be applied not only to Homer but to all things Greek; all must be confronted with the realities of life. The spade-work of mere philology has been done and well done; now is the time for the applied science.

In this task England has the lead, and it is for English Hellenists to keep it. Long before the war I had come to the conclusion that German Homeric scholarship was hopelessly effete and sterile. That conviction has now been deepened by the last and most authoritative utterance of its chief representative, the Rector Magnificus of Berlin University, Herr Professor Dr. Ulrich von Wilamowitz-Möllendorf. I have read his work *Die Ilias und Homer*, published in 1916; and as I read I rubbed my eyes to make sure that I was in the twentieth century; it seemed like an echo of thirty years ago. Then it would have been a noteworthy

production, and would have set us all by the ears. To-day it seems only one sad reminder among many of what Germany might have been if she had read the signs of the times instead of losing her bearings, moral and material, in the mist of her own conceit and megalomania. Believe me, German Homeric scholarship to-day is thirty years behind the times, and will have a hard and humiliating struggle before the lost ground is made up. It is for England to maintain the lead she has got. If it is still allowable to quote *Faust*, I would say to English scholars,

‘Was willst du dich das Stroh zu dreschen plagen?’

‘Lass du das dem Herrn Nachbarn Wanst.’

‘Why wilt thou plague thyself with threshing straw?’

‘Leave that to Neighbour Tumbelly.’

But such progress in Greek scholarship as I look forward to depends largely on the acquisition of new material. The advances made in recent years have all sprung from the work of the excavator and explorer. This work has been rudely interrupted by the war; if more light is to come, the task must be taken up again.

The war has been in this respect almost, but not quite, wholly destructive. Some positive results have been gained, as we shall hear presently from Captain Casson; we welcome them with a certain sense of relief, and consider ourselves fortunate to have had in Captain Casson, a student of the British School at Athens—shortly, I hope, to be its Assistant Director—a trained member of the Headquarters Staff of the British Forces at Salonika. We have had too, in various capacities, and mostly in naval uniform, the assistance at the seat of war of such able and trusted archaeologists as Hogarth, Ernest Gardner, Carr Bosanquet, Dawkins, Myres, Wace and others.

But, alas, we must recognise that excavations carried on by sappers under fire, and still less excavations performed by the explosions of 16-inch shells, are little suited to the exigent requirements of modern archaeology. A prehistoric tumulus lends itself admirably for the formation of a dug-out, and is perhaps somewhat more promising, though by no means ideal, for exact observation. But apart from this I feel confident that our archaeologists with the Forces have been able to do something towards preventing the needless destruction of ancient monuments. In the early days of the war the Society took pains to make representations to this effect in the highest quarters, and we received assurances that the strictest instructions to this effect had been given to the responsible officers. You all know, I do not doubt, that when it was necessary to conduct operations of war in the neighbourhood of the ancient Didyma, Lieut.-Commander Myres was sent aloft in an aeroplane to direct the guns of the fleet so that no damage should be done to the ruins of the temple of Apollo. We have reason to believe that in this he was entirely successful. Nor, I understand, was any harm done to the ruins of Hissarlik by the shells of the Queen Elizabeth and her consorts. We have at least nothing on our consciences to set off against the outrages which we connect with the names of Louvain and Rheims.

There is, however, one curious addition to the methods of the explorer which is directly attributable to the war. In the May number of the *Geographical Journal* there is a paper by Col. Beazeley entitled ‘Air Photography in Archaeology.’ Col. Beazeley there puts on record the discovery of an ancient city on the Tigris, round the modern Samarra. It was a city ‘some twenty miles long and anything up to two-and-a-half miles in width, and must have supported a population of about four millions.’ In all probability it would have passed undiscovered but for photographs taken from the air. The traces on the ground were quite unnoticeable; but from the photographs the whole plan became plainly visible, with its wide main streets and branching roads, and the larger properties of the wealthy inhabitants along the river banks. In the centre was a great public garden, in the form

of four double circles tangential to one another, with a large pavilion in the centre. In addition, Col. Beazeley found a whole system of ancient irrigation by the same means—the main stream, the branching canals, and the regulating buildings by which the flow was distributed. The importance of this may evidently be very great, the advantage of starting the exploration of an ancient site with the plan already plotted can hardly be overrated. It is, I fear, too late to hope that sites in Greece itself can still be discovered by this means; but there is perhaps a faint chance that one of our greatest desiderata, the site of Sybaris, might be thus located, and the exploration of it be thereby brought into the region of possibility. The alluvial deposit there will, I fear, be too deep to betray the slight differences in the tint of vegetation on which the method depends; but if by some happy chance it were otherwise, our knowledge of sixth-century Hellenism might receive new light only comparable to that thrown by Pompeii on the Græco-Roman æge.

But in such a region as Asia Minor the assistance of air photography seems to hold out a great and alluring prospect of success. Unhappily the difficulties here are of another and very grave nature.

You will allow me to recall the proposal I made to the Society just five years ago. It was that we should undertake the publication of a full commentary on the three books of Strabo dealing with Asia Minor. Though I do not think that I underrated the work to be done, I quite hoped that the task might be finished during my term of office. The Council warmly welcomed the proposal, and no time was lost in making our preparations. A Strabo Committee was appointed, the main principles on which the work was to be conducted were agreed, and some specimen pages were printed. This was in the early days when we still fondly hoped that the war could not by any possibility last more than twelve months. Even before the fatal 4th of August I had interviewed several of those whose assistance was essential to us, and had begun to plan the division of the provinces.

One principle which we all accepted as fundamental was that no section should be entrusted to anyone who had not personal acquaintance with his territory. One or two large districts, I found, must wait till we could provide for special visits to this end. I could, for instance, discover no one qualified to deal with the interior of Caria; and even before the war I put myself into communication with Mr. Hasluck and Mr. Ormerod, in the hope of persuading one or other of them to travel through the country and undertake the commentary for this region.

Before anything could be arranged, the whole of Asia Minor became forbidden land, and the great preoccupation of the war in most cases precluded the numerous scholars who had volunteered for the work from even tackling the preliminary book-work needed for the purpose. It is therefore my sad duty to tell you that the scheme has been wholly suspended during the war. In my own portion, the sections of Strabo dealing with the Troad, I had, as it happens, the somewhat unfair advantage of having been over the ground with the scheme already in my head, and with Strabo in my hand. So far as I am concerned, therefore, my part is almost ready, and I can place it at the disposal of the Strabo Committee to decide whether it is worth publishing as a fragment—I may mention that it forms one quarter of the whole—or whether it should wait till better times to take its modest place in a completed whole.

Unfortunately it is impossible to hold out much hope of a completion of the work for a long time to come. Among the unhappy consequences of the war is a deep-seated unrest in the Mahommedan world, only intensified by the Peace Conference, and what is known of its proceedings. Sir William Ramsay, who is of course the backbone of the Strabo plan, had been hoping to get out shortly to Asia Minor, and once more set about his great work there. But I regret to learn from him that he hears—and no man is better informed—that at present it would be quite impossible for any Occidental to live and work in Anatolia, so deeply and gravely

is Moslem feeling stirred. The movement is such as to be a grave risk even to the British Empire, with its many millions of Mahommedan subjects. The installation of Italians and Greeks in Asia Minor is bitterly resented, and the prospects of a peaceful settlement of the Nearer East are remote. Under these circumstances, I sadly fear that all scientific investigation of Asia Minor must for the present be indefinitely postponed. If Sir William Ramsay cannot safely work there, no European can.

In another way too the war has left scars on our science which will not, I fear, be completely healed in our own day. An irreparable blow has been dealt at the sense of international co-operation and fraternity in the advancement of knowledge. Here again our consciences are clear. The blow has not been dealt by us, but by our enemies. Whatever our private feelings may have been, we have put our names to nothing like the infamous manifesto of the 93 leaders of thought in Germany. These men, eminent in all branches of science, including, I regret to think, Hellenism, pledged their honour to a series of statements which they cannot have known, or have had good ground for believing, to be true, inasmuch as they have all been proved false. They have sacrificed their honour as gentlemen, and their honour as men of science.

Some of them—not, I hope, many—have gone further. Men who had received our hospitality and had lived here with all signs of friendliness and mutual honour, have distinguished themselves by attacks on England and Englishmen with a malignity and mendacity which can only be described as ferocious. I will not mention names: one or two are doubtless known to you.

Some of these names still stand on our list of honorary members. It is not for me to say how they should be treated. The Council doubtless wisely, determined to postpone the matter till after the end of the war: and that has not yet come. It is therefore left to my successor to preside over the discussion of the question, and I willingly leave it to his hands. That the outrage which scientific Germany has dealt to science should be either ignored or wholly condoned I cannot feel. But I trust that, as I took office with war, I may be allowed to lay it down with a note of peace. There will be a real League of Nations when Germany has made due recompense for wrongs and sued to be admitted again to fellowship. When that is duly done, Germany can again be admitted also to the fellowship of science which her insults have forfeited, and it should be on like conditions of apology and proofs of sanity regained. With all my heart I wish that the day may come, and come soon. Humanity cannot afford to wait long.

The President moved the adoption of the Annual Report and Balance Sheet.

Professor Gilbert Murray said that his first feeling on reading the Report was one of consternation at the announcement of Mr. George Macmillan's impending resignation.

He could not imagine the Society without its Honorary Secretary, but took some comfort in the thought that the resignation was not to take place immediately. He desired to convey to Dr. Leaf an expression of gratitude for his address, in which even the most ordinary observer must note the effect of Hellenic culture. His own thoughts were preoccupied day and night by the future of this culture, but he felt that if it could be imbued with the broad and progressive spirit which breathed through the President's address, the lovers of Hellenism might look forward with confidence to the future. There was a heavy task before them, they must

be aggressive on its behalf, and much work would fall on the Society whose natural mission it was to champion the cause of the studies which it was formed to promote. He had much pleasure in seconding the adoption of the Report.

H.E. Monsieur Gennadius in supporting the motion associated himself with what had been said by Professor Murray, both respecting the President's inspiring address, and the resignation of Mr. Macmillan. He, himself, had had the privilege of being intimately connected with the proceedings which led to the formation of the Society, and his connexion with it was one of his proudest recollections.

The President then put the motion, which was carried unanimously.

A vote of thanks to the Auditors, Messrs C. F. Clay and W. E. F. Macmillan, proposed by Mr. A. J. B. Wace and seconded by Mr. E. Norman Gardiner, was carried unanimously.

Mr. Macmillan begged leave to return thanks for the very kind words evoked by the announcement of his impending resignation, though in inserting the paragraph in the Report he had not been actuated by the spirit which led Lord Brougham to send a notice of his own death to the *Times*, in order to find out what people thought of him. It was true that he had asked to be relieved of the Hon. Secretaryship, but when a suitable successor had been found he hoped as Hon. Treasurer still to remain an Official of the Society with which he had been officially connected for 40 years (Applause).

The President then called on Mr. Stanley Casson (late G.H.Q., Balkan Field Force) to read a paper, illustrated by lantern slides, on 'Antiquities discovered on the Salonika Front.' Mr. Casson shewed an interesting panorama embracing the whole mountain ranges from Lake Doiran to Rupit. The finds described extended from the prehistoric to the Roman age. Most of these are now in the British Museum. A list will be found in the fifth list of Accessions to the Collection of Slides published in this volume, p. xlv.

INCOME AND EXPENDITURE ACCOUNT. From JUNE 1, 1913, to DECEMBER 31, 1913.

<i>Expenditure.</i>		<i>Income.</i>	
To Rent	£ 1 4 121 18 4	By Members' Subscriptions—	£ 1 4 0
“ Salaries—		Proportion brought forward from last year... 542 0 0	
Librarian and Secretary	81 13 4	Received since	40 19 0
Assistant Treasurer	17 1 8		584 8 0
Librarian	13 17 0	Members' Entrance Fees	21 0 0
Typeset, &c.		Libraries Subscriptions—	
Insurance	142 12 0	Proportion brought forward from last year... 91 17 6	
“	9 6 3	Received since	27 0 0
Miscellaneous Expense	11 16 24		119 3 0
Stationery	9 7 3	Life Compositions brought into Revenue Account	42 0 0
Postage	17 16 04	“ Dividends on Investments	32 5 0
“ Stationery, Printing, Rules, List of Members,		“ Contributed towards Rent by British School at	
Notices, &c.	12 6 0	Athens and British School at Rome for use of	21 13 4
“ Heating, Lighting, and Cleaning Library Premises	17 19 10	Society's room	
“ Grants		Rent of room occupied by the Royal Archaeolog-	2 10 0
British School at Athens		ical Institute	
“		Contributed by the Society for the Foundation of	
“		Roman Studies	
“		Rent	17 10 0
“		Use of Library	39 3 4
“ Balance from Library Account	24 4 11		
“ Balance from ‘Journal of Hellenic Studies’	168 19 11	“ Sale of Excavations at Phylakopi	46 13 4
Account	12 0	“ Balance from Lantern Slides and Photographs	2 0 0
“ Depreciation of Stocks of publications		Account	1 14 8
		Balance	71 13 2

£736 18 9

£736 18 9

BALANCE SHEET, DECEMBER 31, 1918

Liabilities

To Debits Payable	£	s	d	£	s	d
" Subscriptions paid in advance	430	2	48			
" Endowment Fund	15	15	0			
(includes legacy of £200 from the late Canon Adams Parry and £200 from the late Rev. H. P. Torrey)	781	5	0			
Emergency Fund (Library Filings and Furniture)						
Total Received	394	18	0			
Life Compositions and Donations—						
Total at June 1, 1918	1940	0	0			
Received during year	15	15	0			

Less carried to Income and Expending Account—Members deceased	42	0	0			
Surplus Balance at June 1, 1918	70	13	0			
Less debit balance from Income and Expending Account	71	13	0			
Surplus Balance at December 31, 1918				5	0	7

£3312 5 54

Assets

By Cash in Hand—Bank	£	s	d	£	s	d
Account Treasurer	53	1	7			
Petty Cash	15	7	11			
Debits Receivable				100	13	0
Investments (Life Compositions)				33	15	04
(Endowment Fund)				384	3	11
				770	0	0

4154 3 11

Less Reserved against Depreciation

100 0 0

4054 3 11

476 0 0

447 10 0

250 0 0

1 1 10

28 15 0

£3312 5 54

Examined and found correct.

(Signed) C. F. CLAY.

W. E. P. MAUMILLAN.

SIXTEENTH LIST OF BOOKS AND PAMPHLETS

ADDED TO THE
LIBRARY OF THE SOCIETY
SINCE THE PUBLICATION OF THE CATALOGUE

1918—1919

With this list are incorporated books belonging to the Society for the Promotion of Hellenic Studies. These are distinguished by n.s.

NOTE.—The Original Catalogue published in 1903, with all the supplements appended, can be purchased by members and subscribing libraries at 4/9 (by post 5/3). Applications should be made to the Librarian, 19, Bloomsbury Square, W.C.1.

Aeland (H.D.) See Maps. Plains of Troy.

Aeschylus. *The Agamemnon*. Translated by R. K. Davies.

8vo. Oxford. 1919.

Aeschylus. *Agamemnon*. Öfversättning af B. Risberg. [Svenska Hum. Förl. Skr. XXXI]. 8vo. Stockholm. 1917.

Albania. *Albania's reply to the demands of M. Venizelos*. 8vo. 1919.

Allison (R.) *Translator*. See *Lauretius*.

Andreades (A. M.) *Ὁ Δῶκε καὶ ἡ Ἑλλάς*.

8vo. Athens. 1918.

Archaeologia, or miscellaneous tracts relating to antiquity. Vols. XVII, XXI–XXIII. 4to. 1814, 1829–31.

Andreades (A. M.) *Ἱστορία τῆς Ἑλληνικῆς δημοτικῆς οἰκονομίας ἀπὸ τοῦ ἡρωικοῦ χρόνου μέχρι τῆς συστάσεως τοῦ Ἑλληνικοῦ βασιλείου*. 8vo. Athens. 1918.

Andreades (A. M.) *Περὶ Νομισματοῦ καὶ τῆς κτητικῆς διαταγῆς τῶν πολέμων μετὰλλω κατὰ τοὺς Βεζαντινούς χρόνους* [Ἐκτ. τοῦ Πανεπιστημίου 1916–17]. 8vo. Athens. 1918.

Andreades (A. M.) *Ἡ δημοσία οἰκονομία τῶν Σαρακηνῶν* [Πανεπιστ. 1915]. 8vo. Athens. 1915.

Andreades (A. M.) *Περὶ τοῦ πληθυσμοῦ καὶ τοῦ πλοῦτος τῆς Κωνσταντινουπόλεως κατὰ τοὺς μέσους χρόνους* [Πανεπιστ. 1917]. 8vo. Athens. 1918.

Angus (S.) *Translator*. See *Thunberg (A.)*.

- Aristophanes.** *The Clouds.* Ed. W. W. Merry. 8vo. Oxford. 1889.
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- Armstrong (M. E.)** *The significance of certain colors in Roman Ritual.* 8vo. Wisconsin. 1917.
- Arnold (E. V.)** *The restored pronunciation of Greek and Latin. With tables and practical explanations.* 8vo. Cambridge. 1895.
- Ashby (T.)** *Editor. See Póras (E. du).*
- Athens.** National Museum. *Tò te 'Aθῆναι ἱερὸν Μουσείον, τὸ ἐν Ν. Σόφιστρει.* Texts and Plates. From Pt. I. (1904). 4to. Athens. *In Progress.*
- Baizer (J. G.)** *Editor. See Cicero.*
- Ball (J.)** *The Antiquities of Constantinople with a Description of its Situation, the Conveniences of its Port, its Publick Buildings, the Statuary, Sculpture, Architecture and other Curiosities of that City.* 8vo. 1729.
- Barker (E.)** *Greek Political Theory: Plato and his predecessors.* 8vo. N.D.
- Beardslee (J. W.)** *The use of ὀΥΣΙΣ in fifth-century Greek literature.* 8vo. Chicago, Ill. 1918.
- Beaudouin (M.)** *Étude du dialecte chypriote. [Bibl. d. écoles franc. d'Ath. et de Rome, 36.]* 8vo. Paris. 1884.
- Beazley (J. D.)** *Athen red-figured vases in American Museums.* 4to. Cambridge, Mass. 1918.
- Bell (T. L.)** *The Byzantine servile state in Egypt. [J.E.A. IV., 2-3.]* 4to. 1917.
- Bent (J. Th.)** *Editor. See Hakluyt Society.*
- Bergstedt (H.)** *Svenska Humanistika Forbundet. 1896-1915. [Svenska Hum. Forh. Skr. XXVI.]* 8vo. Stockholm. 1915.
- Bergstedt (H.)** *Grekiska motiv per Hallstanes diktning. [Svenska Hum. Forh. Skr. XXX.]* 8vo. Stockholm. 1917.
- Bertaut (E.)** *Rome. 3 vols. [Les villes d'art célèbres.]* 8vo. Paris. 1916.
- Bion.** *The Lament for Adonis. Translated by W. Bryher.* 4to. 1918.
- Blackwell (T.)** *An enquiry into the life and writings of Homer.* 8vo. 1736.
- Boltz (A.)** *Die hellenische oder mägriechische Sprache.* 8vo. Darmstadt. 1681.
- Bousquet (G.)** *Bulgaria. [Lecture delivered before Sociolog. Soc. Paris.]* 8vo. Sofia. 1918.
- British Museum.** *A Short Guide to the war-time exhibition.* 8vo. 1918.
- Bryher (W.)** *Translator. See Bion.*
- Budge (E. A. W.)** *The Rosetta Stone.* 4to. 1913.

- Bywater (Ingram).** *Memoir* by W. W. Jackson. [Proc. Brit. Acad. VII.] 8vo. 1916.
- Caesar.** *C. Julii Caesaris Commentarii de Bello Civil.* ed. F. Kranert. 10th. ed. by F. Hoffmann. 8vo. Berlin. 1890.
- Caesar.** *C. Julii Caesaris Commentarii de Bello Gallico.* ed. F. Kranert. 15th. ed. by W. Dittenberger. 8vo. Berlin. 1890.
- Cagnat (R.)** *Carthage, Tingad, Tébessa et les villes antiques de l'Afrique du Nord.* 2nd. ed. [Les villes d'art célèbres.] 8vo. Paris. 1912.
- Cairo.** *Catalogue Général des Antiquités Egyptiennes du Musée du Caire.* Papyrus grecs d'Époque Byzantine. Vol. III., by J. Maspéro. 4to. 1916. Cairo.
- Callinicos (C.)** *The Greek Orthodox Church.* 8vo. 1918.
- Cellarius (C.)** *Notitiae orbis antiqui sive geographiae primariae totius orbis.* Edited by Schwartz (L. Ju. C.) 4to. Leipzig. 1733.
- Cicero (M. T.)** *M. Tullii Ciceronis opera quae supersunt omnia.* 11 vols. edd. J. G. Baier and C. L. Kayser. 8vo. Leipzig. 1860-69.
- Clark (A. C.)** *The descent of manuscripts.* 8vo. Oxford. 1918.
- The Classics in British Education.** [Reconstruction Problems. 21.] 8vo. 1919.
- Cobham (C. D.)** *Excerpta Cypria. Materials for a history of Cyprus: with an appendix on the bibliography of Cyprus.* 4to. Cambridge. 1908.
- Conway (R. S.)** *The Venetian point of view in Roman history.* [Bulletin of the John Rylands Library. Vol. I., Nos. 4, 5, Feb.-July, 1918.] Manchester. 1917-1918.
- Cowley (A. E.)** *The Lycian language.* [Mon. 1902. 50, 60.] 8vo. 1902.
- Cronin (H. S.)** *An examination of some omissions of the Codex Sinaiticus in St. John's Gospel.* [Journ. of Theol. Studies. Vol. XIII., No. 52.] 8vo. 1912.
- Crusius (O.)** *Erwin Rohde. Ein biographisches Versuch.* [Ergänzungsheft zu Rohdes Kleine Schriften.] 8vo. Tübingen and Leipzig. 1902.
- Cumont (F.)** *Études Syriennes.* 4to. Paris. 1917.
- Custance (B.)** *War at Sea. Modern theory and ancient practice.* 8vo. Edinburgh. 1919.
- Davies (R. K.)** *Translator.* See Aeschylus.
- Demosthenes.** *On The Crown.* Ed. W. W. Goodwin. 8vo. Cambridge. 1904.
- Dempsey (Rev. T.)** *The Delphic Oracle: its early history, influence and fall.* 8vo. Oxford. 1918.
- Derjavine (N. S.)** *Les rapports bulgare-serbes et la question macédonienne.* 8vo. Lausanne. 1918.

- n.s. de Sanctis (G.)** *La conquista del Primato in Italia*. 2 vols. [Vols. I. and II. of *Storia dei Romani*. Nos. 32 and 33 of *Bibl.^{na} di Scienze moderne*.] 8vo. Turin. 1907.
- n.s. Desdevises-du-Dézert (G.)** *Clermont-Ferrand Royat et le Puy de Dôme*. [Les Villes d'Art célèbres.] See also Bréhier (L.). 8vo. Paris. 1910.
- n.s. Diehl (C.)** *Palermo et Syracuse*. [Les Villes d'Art célèbres.] 8vo. Paris. 1907.
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- Dio Cassius**. *Dionis Cassii Cocceiani Historia Romana cum annotationibus L. Dindorfii*. 5 vols. 8vo. Leipzig. 1853.
- Dittenberger (W.)** *Editor*. See Caesar.
- Dittenberger (W.)** *Sylloge Inscriptionum Graecarum*. 3rd. ed. vols. 1, 2. Ed. by E. Hiller von Gaertringen. 8vo. Leipzig. 1915-1917.
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- Dodwell (H.)** See India.
- n.s. Douel (M.)** *Sept Villes Mortes*. 8vo. Paris. 1917.
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- Fitzhugh (T.)** *The Indo-European superstress and the evolution of verse.* [Univ. of Virginia. Bull. of School of Latin, No. 9.] 8vo. Charlottesville, Va. 1917.
- Fitzhugh (T.)** *Editor.* See **Jefferson (T.)**.
- Flickinger (R. C.)** *The Greek theater and its drama.* 8vo. Chicago. 1918.
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- Foster (F. M. K.)** *English translations from the Greek: a bibliographical study.* [Columbia Univ. Studies in Eng. and Comp. Phil.] 8vo. New York. 1918.
- Foucart (P.)** *Le culte des héros chez les Grecs.* [Mémoires de l'Académie des Inscriptions et Belles Lettres. Vol. XLII.] 8vo. Paris. 1918.
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- Gardner (P.)** *A history of ancient coinage, 700-300 B.C.* 8vo. Oxford. 1918.
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- Garnett (L. M. J.)** *Greece of the Hellenes.* 8vo. 1914.
- Garnsey (E. R.)** *Editor.* See **Horace**.
- f.f. Garosa (P.)** *Sant' Agostino e la decadenza dell' Impero Romano.* [Didaskaleion IV. Fasc. III-IV.] 8vo. Torino. 1916.
- Glötz (G.)** *Le droit des gens dans l'antiquité grecque.* [Mem. Acad. d'Insc. XIII.] 4to. Paris. 1915.
- Goodell (T. D.)** *Chapters on Greek metric.* [Yale Bi-centennial Publications.] 8vo. Newhaven. 1901-1918.
- f.f. Graf (A.)** *Roma nella memoria e nelle immaginazioni del medio evo.* (Ristampa.) 8vo. Torino. 1915.
- Grammar.** *On the terminology of Grammar, being the Report of the Joint Committee on Grammatical terminology.* 8vo. 1911.
- Granville (A.)** *Translator.* See **Faivre (J.)**.
- Groot (A. W. de)** *A handbook of antique prose-rhythm, 1.* 8vo. Groningen. 1918.

- n.s. Groot (A. W. de) *De numero oratorio Latino commentatio*,
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- Hoffman (F.) *Editor*. See Caesar.
- Holzapfel (L.) *Il numero dei Senatori Romani durante il periodo
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- n.a. Hope (L. E.)** See May (T.).
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- Horace.** A Student's edition of the Odes of Horace. Books I. to III., by E. R. Gurney. 8vo. 1910.
- Horton (G.)** Modern Athens. 8vo. 1902.
- Hudson-Williams (T.)** An Education Bill from ancient Greece, [A paper read to the Leeds and District Branch of the Classical Association.] 8vo. Cambridge. 1917.
- Huelsen (Ch.)** Il Foro Romano, Storia e Monumenti. 8vo. Rome. 1905.
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- Hughes (W.)** Editor. See Philips.
- India.** The Archaeological Survey of. XL. The Astronomical Observatories of Jai Singh, by G. R. Kaye. 4to. Calcutta. 1918.
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- Ivanoff (J.)** Bulgares et Grecs devant l'opinion publique Suisse. 8vo. Berne. 1918.
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- Jackson (W. W.)** See Bywater (Ingram).
- Jefferson (T.)** Letters of, concerning Philology and the Classics. Edited by T. Fitzhugh. [Alumni Bull., 1918, 1919.] 8vo. Charlottesville, Va. 1919.
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- Jerphanion (G. de)** Inscriptions de Cappadoce et du Pont. [Mél. de la Fac. Orient de Beyrouth, VII.] 8vo. Beyrouth. 1914.
- Johansen (K. F.)** Sikyoniske Vaser 4to. Copenhagen. 1918.
- Kaye (G. R.)** See India. The Astronomical observatories of Jai Singh.
- Kayser (C. L.)** Editor. See Cicero.

- Kennett (B.)** *The Antiquities of Rome*, 7th. edit. 8vo. 1721.
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- Kenyon (F. G.)** *Education, secondary and university. A report of conferences between the Council for humanistic studies and the Conjoint Board of scientific societies*. 8vo. 1919.
- Kitintcheff (S.)** *Quelques notes de réponse aux calomnieux des Macédoniens*. 8vo. Lausanne. 1919.
- Kostopoulos (E. K.)** *Ἱστορικὴ Συναγωγὴ τῶν Νόμων*. Pt. 1.
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- Kranert (F.)** *Editor*. See *Caesar*.
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- Leoni (U.)** *The Palatine*. [Monuments of Italy, No. 8.]
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- Lépine (G.)** *La macédoine indivisible devant le futur Congrès de la Paix*. 8vo. Lausanne. 1918.
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2 vols. 4to. Paris. 1913-1915.
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- Margoliouth (D. S.)** *The chronograms of the Euripidean dramas*. 8vo. Oxford. 1915.
- Mariani (F.)** *De Etruria metropoli quae, Turchenia, Tuscania, Tuscania atque enim Peterbon diata est*. 4to. Rome. 1728.
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- 9586 Gold seal ring of Valens (?) (Orus-Tyranus).
 1243-1245 Four views of the 'Tazza Castellana.' Rome, Mus. Conservatori.
 6298 Strychia combat. Silver quiver case found at Nicodmiff.
 279 Imm. (Bears of Oropus, 249 s.c. Elgin Coll. (B.M. *Inventory*, vol. A.)

COINS.

Towns, &c.

- 9542 Abydos, E. Allua, R. Sagalaesus & Teomus Alexandrine. (*N.C.* 1917, pl. 2, 1¹ 1² 1³.)
 9156 Argos, E. Cilician small, Elasmus E. (*N.C.* 1917, pl. 2, 1¹ 1².)
 9652 Allinda, R. Abydos, E. Sagalaesus and Teomus Alexandrine. (*N.C.* 1917, pl. 2, 1¹ 1² 1³.)
 9549 Athens, R and E. Tanagra, Ionian proof. (*N.C.* 1917, pl. 1, 1¹ 1² 1³ 1⁴.)
 9550 Autocane, Lampacae, R. Cyrene, R. Ionian uncertain, R. (*N.C.* 1917, pl. 2, 1¹ 1² 1³.)
 9555 Cilician small, Elasmus, R. Argos, E. (*N.C.* 1917, pl. 2, 1¹ 1².)
 9547 Croton, Syracuse, R. Etruria, R. (*N.C.* 1917, pl. 1, 1¹ 1².)
 9550 Cyrene, R. Ionian uncertain, R. Lampacae, Autocane, E. (*N.C.* 1917, pl. 2, 1¹ 1² 1³.)
 9555 Elasmus, Cilician small, R. Argos, E. (*N.C.* 1917, pl. 2, 1¹ 1².)
 9547 Etruria, E. Croton, Syracuse, R. (*N.C.* 1917, pl. 1, 1¹ 1².)

MISCELLANEA.

- 5278 Wooden origin of Doric order, diagrams. (Choisy, *J. D'Architecture*, p. 232.)
- 5279 Development of Ionic order, diagrams. (Choisy, *Id. Architecture*, p. 232.)
- 5467 Methods of excavation : specimen sketches of stratification. (Droop, *Archæol. Excav.*
p. 18.)
- 5468 " " plan and section to illustrate graphic publication. (*Id.*, p. 71.)
- 4483 Greek mounethers, group of three actors.
- 4484 " " the *corps dramatique*.
- 5532 Henry Schlemmann : later portrait with autograph.

THE BRITISH ACADEMY

CROMER GREEK PRIZE

WITH the view of maintaining and encouraging the study of Greek, particularly among the young, in the national interest, Lord Cromer has founded an Annual Prize, to be administered by the British Academy, for the best Essay on any subject connected with the language, history, art, literature, or philosophy of Ancient Greece.

The Prize, which is ordinarily a sum of £40, is awarded annually in March, under the following Rules:—

1. Competition is open to all British subjects of either sex who will be under twenty-six years of age on 31 Dec. preceding the award.

2. Any such person desirous of competing must send in to the Secretary of the British Academy on or before 1 June of the year preceding the award the title of the subject proposed by him or her. The Academy may approve (with or without modification) or disapprove the subject; their decision will be intimated to the competitor as soon as possible.

3. Preference will be given, in approval of subjects proposed, to those which deal with aspects of the Greek genius and civilization of large and permanent significance over those which are of a minute or highly technical character.

4. Any Essay already published, or already in competition for another prize of the same nature, will be inadmissible. A candidate to whom the Prize has been awarded will not be eligible to compete for it again. But an Essay which has not received the Prize may be submitted again (with or without alteration) in a future year so long as the writer remains eligible under Rule 1.

5. Essays of which the subject has been approved must be sent in to the Secretary of the Academy on or before 31 Dec. They must be typed (or, if the author prefers, printed), and should have a note attached stating the main sources of information used.

6. It is recommended that the Essays should not exceed 20,000 words, exclusive of notes. Notes should not run to an excessive length.

7. The author of the Essay to which the Prize is awarded will be expected to publish it (within a reasonable time, and after any necessary revision), either separately, or in the Journals or Transactions of a Society approved by the Academy, or among the Transactions of the Academy.

The Secretary of the Academy will supply, on application, to any person qualified and desirous to compete, a list of some typical subjects for general guidance only, and without any suggestion that one or another of these subjects should be chosen, or that preference will be given to them over any other subject of a suitable nature.

Communications should be addressed to 'The Secretary of the British Academy, Burlington House, Piccadilly, London, W.'

NOTICE TO CONTRIBUTORS

THE Council of the Hellenic Society having decided that it is desirable for a common system of transliteration of Greek words to be adopted in the *Journal of Hellenic Studies*, the following scheme has been drawn up by the Acting Editorial Committee in conjunction with the Consultative Editorial Committee, and has received the approval of the Council.

In consideration of the literary traditions of English scholarship, the scheme is of the nature of a compromise, and in most cases considerable latitude of usage is to be allowed.

(1) All Greek proper names should be transliterated into the Latin alphabet according to the practice of educated Romans of the Augustan age. Thus α should be represented by *a*, the vowels and diphthongs *υ*, *αι*, *οι*, *ου* by *y*, *ae*, *oe*, and *u* respectively, final *-ος* and *-ου* by *-us* and *-um*, and *-πος* by *-er*.

But in the case of the diphthong *αι*, it is felt that *ei* is more suitable than *e* or *i*, although in names like *Laodicea*, *Alexandria*, where they are consecrated by usage, *e* or *i* should be preserved, also words ending in *-αια* must be represented by *-eia*.

A certain amount of discretion must be allowed in using the *o* terminations, especially where the Latin usage itself varies or prefers the *o* form, as *Deos*. Similarly Latin usage should be followed as far as possible in *-e* and *-a* terminations, e.g., *Perice*, *Smyrna*. In some of the more obscure names ending in *-πος*, as *Alaypos*, *-er* should be avoided, as likely to lead to confusion. The Greek form *-ον* is to be preferred to *-o* for names like *Dion*, *Hieron*, except in a name so common as *Apollo*, where it would be pedantic.

Names which have acquired a definite English form, such as *Corinth*, *Athens*, should of course not be otherwise represented. It is hardly necessary to point out that forms like *Heracles*, *Mercury*, *Minerva*, should not be used for *Heracles*, *Hermes*, and *Athena*.

(2) Although names of the gods should be transliterated in the same way as other proper names, names of personifications and epithets such as *Nike*, *Homonoia*, *Hyakinthos*, should fall under § 4.

(3) In no case should accents, especially the circumflex, be written over vowels to show quantity.

(4) In the case of Greek words other than proper names, used as names of personifications or technical terms, the Greek form should be transliterated letter for letter, *k* being used for *κ*, *ch* for *χ*, but *y* and *u* being substituted for *υ* and *ου*, which are misleading in English, e.g. *Nike*, *apaxygmatism*, *diadumenos*, *rhyton*.

This rule should not be rigidly enforced in the case of Greek words in common English use, such as *debris*, *symposium*. It is also necessary to preserve the use of *ou* for *ου* in a certain number of words in which it has become almost universal, such as *boule*, *gerousia*.

(5) The Acting Editorial Committee are authorised to correct all MSS. and proofs in accordance with this scheme, except in the case of a special protest from a contributor. All contributors, therefore, who object on principle to the system approved by the Council, are requested to inform the Editors of the fact when forwarding contributions to the Journal.

In addition to the above system of transliteration, contributors to the *Journal of Hellenic Studies* are requested, so far as possible, to adhere to the following conventions:—

Quotations from Ancient and Modern Authorities.

Names of authors should not be underlined; titles of books, articles periodicals, or other collective publications should be underlined (for *titles*). If the title of an article is quoted as well as the publication in which it is contained, the latter should be bracketed. Thus

Six, *Jahrb.* xviii. 1903, p. 34.

or—

Six, *Prologomena* (*Jahrb.* xviii. 1903), p. 34.

But as a rule the shorter form of citation is to be preferred.

The number of the edition, when necessary, should be indicated by a small figure above the line; e.g. *Dittenb. Syll.*² 123.

Titles of Periodical and Collective Publications.

The following abbreviations are suggested, as already in more or less general use. In other cases, no abbreviation which is not readily identified should be employed.

- A.-E.M.* = Archäologisch-epigraphische Mitteilungen.
Ann. d. I. = Annali dell' Instituto.
Arch. Anz. = Archäologischer Anzeiger (Beiblatt zum Jahrbuch).
Arch. Zeit. = Archäologische Zeitung.
Att. Mitt. = Mitteilungen des Deutschen Arch. Inst., Athenische Abteilung.
 Baumeister = Baumeister, Denkmäler des klassischen Altertums.
B.C.H. = Bulletin de Correspondance Hellénique.
Berl. Vas. = Furtwängler, Beschreibung der Vasensammlung zu Berlin.
B.M. Bronzes = British Museum Catalogue of Bronzes.
B.M.C. = British Museum Catalogue of Greek Coins.
B.M. Inscr. = Greek Inscriptions in the British Museum.
B.M. Sculpt. = British Museum Catalogue of Sculpture.
B.M. Terracottas = British Museum Catalogue of Terracottas.
B.M. Vases = British Museum Catalogue of Vases, 1893, etc.
B.S.A. = Annual of the British School at Athens.
B.S.E. = Papers of the British School at Rome.
Bull. d. I. = Bollettino dell' Instituto.
 Busolt = Busolt, Griechische Geschichte.
C.I.G. = Corpus Inscriptionum Graecarum.
C.I.L. = Corpus Inscriptionum Latinarum.
Cl. Rev. = Classical Review.
C.R. Acad. Inscr. = Comptes rendus de l'Académie des Inscriptions.
C.R. St. Pétr. = Comptes rendus de la Commission du St. Pétersbourg.
 Dar. Sogl. = Darzberg-Saglio, Dictionnaire des Antiquités.
 Dittenb. *O.G.I.* = Dittenberger, *Orientalis Graeci Inscriptiones Selectae*.
 Dittenb. *Syl.* = Dittenberger, *Sylloge Inscriptionum Graecarum*.
Ép. Græc. = *Épigraphis Græcæ*.
G.I.I. = Collitz, Sammlung der Griechischen Dialekt-Inschriften.
 Gerh. *A. F.* = Gerhard, Auserlesene Vasenbilder.
G.G.A. = Göttingische Gelehrte Anzeigen.
 Heidl. *H.N.* = Heidl, *Historia Numorum*.
I.G. = *Inscriptiones Graecae*.¹
I.G.A. = Rühl, *Inscriptiones Graecae Antiquissimae*.
Jahrb. = Jahrbuch des Deutschen Archäologischen Instituts.
Jahresh. = Jahrshefte des Österreichischen Archäologischen Instituts.
J.H.S. = Journal of Hellenic Studies.
 Klio = Klio (Beiträge zur alten Geschichte).
 Le Bas-Wadd. = Le Bas-Waddington, *Voyage Archéologique*.
 Michel = Michel, *Recueil d'Inscriptions grecques*.
Mon. d. I. = *Monumenti dell' Instituto*.
 Müller-Wies. = Müller-Wieseler, Denkmäler der alten Kunst.
Mus. Marble. = Collection of Ancient Marbles in the British Museum.
Neue Jahrb. H. Alt. = Neue Jahrbücher für das Klassische Altertum.
Neue Jahrb. Phil. = Neue Jahrbücher für Philologen.

¹ The attention of contributors is called to the fact that the titles of the volumes of the second issue of the *Corpus of Greek Inscriptions*, published by the Prussian Academy, have now been changed as follows:—

<i>I.G.</i>	I =	Inscr.	Atticae anno Euclidis verutiarum.
"	II =	"	" notatis quae sunt inter Eucl. ann. et Augusti tempora.
"	III =	"	" notatis Romanis.
"	IV =	"	Aegolida.
"	VII =	"	Megaridis et Boeotiae.
"	IX =	"	Graeciae Septentrionalis.
"	XII =	"	Inscr. Maris Aegaei praeter Delum.
"	XIV =	"	Italiae et Siciliae.

- Niese = Niese, Geschichte der griechischen u. makedonischen Staaten.
Nom. Chr. = Numismatische Chronik.
Nom. Zeit. = Numismatische Zeitschrift.
 Pauly-Wissowa = Pauly-Wissowa, Real-Encyclopädie der classischen Altertumswissenschaft.
Philol. = Philologus.
Ramsey, C. R. = Ramsey, Cities and Bishoprics of Phrygia.
Ramsey, Hist. Geog. = Ramsey, Historical Geography of Asia Minor.
Reinach, Rep. Sculpt. = S. Reinach, Répertoire des Sculptures.
Reinach, Rep. Vases = S. Reinach, Répertoire des Vases peints.
Rev. Arch. = Revue Archéologique.
Rev. Ét. Gr. = Revue des Études Grecques.
Rev. Num. = Revue Numismatique.
Rev. Philol. = Revue de Philologie.
Rh. Mus. = Rheinisches Museum.
Röm. Mitt. = Mittheilungen des Deutschen Archäologischen Instituts, Römische Abteilung.
 Roscher = Roscher, Lexicon der Mythologie.
S. M. C. = Sparta Museum Catalogue.
T. A. M. = Trifoli Aeneas Minerva.
Z. f. N. = Zeitschrift für Numismatik.

Transliteration of Inscriptions

- [] Square brackets to indicate additions, i.e. a lacuna filled by conjecture.
 () Curved brackets to indicate alterations, i.e. (1) the resolution of an abbreviation or symbol; (2) letters misrepresented by the engraver; (3) letters wrongly omitted by the engraver; (4) mistakes of the copyist.
 < > Angular brackets to indicate omissions, i.e. to enclose superfluous letters appearing on the original.
 . . . Dots to represent an unfilled lacuna when the exact number of missing letters is known.
 - - - Dashes for the same purpose, when the number of missing letters is not known.
 Uncertain letters should have dots under them.
 Where the original has aota adscript, it should be reproduced in that form; otherwise it should be supplied as subscript.
 The aspirate, if it appears in the original should be represented by a special sign.^{*}

Quotations from MSS. and Literary Texts

The same conventions should be employed for this purpose as for inscriptions, with the following important exceptions:—

- () Curved brackets to indicate only the resolution of an abbreviation or symbol.
 [] Double square brackets to enclose superfluous letters appearing on the original.
 < > Angular brackets to enclose letters supplying an omission in the original.

The Editors desire to impress upon contributors the necessity of clearly and accurately indicating accents and breathings, as the neglect of this precaution adds very considerably to the cost of production of the *Journal*.

GREEK PAPYRI AND THEIR CONTRIBUTION TO CLASSICAL LITERATURE.¹

THE enemies of classics sometimes say that it is a dead subject. They depict the classical scholar as spending his time in re-reading, re-editing, or re-annotating texts which have been read, edited, and annotated for generations or centuries; and they contrast him with the student of science, before whom the inexhaustible riches of nature are displayed as his quarry. It were strange, if this were true, that classical study should possess—as by the common experience of public schools it does possess—a capacity unsurpassed by any other subject for turning out men of practical ability and aptitude for the affairs of the world.² But it is not true. The enemies of classics, in this as in other instances, have erected a dummy in order to knock it over. They may be reproducing traditions of their fathers, or of their own boyhood; but they are showing that they have not kept abreast of their own times, and that they are not competent to criticise a study of which they know so little. Even natural science, with all its wonderful discoveries, has not been a more living subject during the last half century than the study of classical antiquity. Literature and archaeology—which mean the record of the thoughts of man as expressed in words and in art, during a period when that expression was at its highest pitch of perfection—have gone from discovery to discovery, from development to development, at a rate unequalled even at the Renaissance. These years have given fresh life to the study of the heroic age of human intellectual progress; they have shown that the treasures of antiquity are not only to be enjoyed but are to be increased.

In the case of art and archaeology, both the origins of this age of progress and the period of great achievement date farther back than in the case of literature. The origins may be traced to the activities of the Society of Dilettanti in the eighteenth century, while the greatest achievement of all, the salvation of the Parthenon Marbles, is just a hundred years old; and this was followed, in the course of the next half century, by the excavations

¹ This Paper was communicated to the Leeds Branch of the Chemical Association at its fourth annual meeting, January 26, 1918. The Editors have to thank the Committee of

the Branch for permission to reprint it here.

² See *Value of the Classics*, ed. A. P. West, pp. 378-383 (Princeton, 1917).

and explorations which brought to light the temple of Phigaleia, the vases of Etruria, the mausoleum of Halicarnassus, and many other examples of classic art. To the third quarter of the century may also be assigned approximately the development of that study of Greek and Latin inscriptions which has done so much to extend and vivify our knowledge of ancient history. These are the works of previous generations: but our own has progress at least equal to show. Troy, Mycenae, Tiryns, Olympia, Pergamum, Delphi, Crete, the Acropolis of Athens and the Forum of Rome,—these are only the greater and more outstanding names which bring to mind the wonderful wealth of treasures and of information which has been disinterred by the explorer's spade within the memory of men still young enough to be wearing khaki to-day.

With literature the dates of discovery are later. We may start with the excavation of the Herculaneum papyri in 1752, with the first discovery of a Greek papyrus in Egypt in 1778, with the first literary papyrus in 1821, or with the recovery of the first lost text in 1847. In 1877 a new step forward was made in the first discovery of papyri (mostly non-literary) on a large scale in the Fayum, but it was not until 1890, only twenty-eight years ago, that the great age of papyri opened with the discovery by Prof. Flinders Petrie of papyri of the third century B.C. in the cartonnage of mummies, and the acquisition by the British Museum of the group of manuscripts which included the *'Αθηναίων Πολιτεία* of Aristotle, the *Mimes* of Herodas, and other literary papyri of great, though lesser, interest.

The papyrus age *par excellence*, therefore, has lasted little more than a quarter of a century, but its wealth is such as to tax an hour's lecture even to summarise, and to make us congratulate ourselves that we have witnessed it. Prof. Rhys Roberts has asked me to undertake the task of laying before you a summary of its results: and if I have assented, it is partly because I would not willingly refuse a request from one who has worked so hard and done so much for the interests of classical study as Prof. Rhys Roberts, and partly because I think it is the duty of those who are engaged in any particular branch of study occasionally to give an account of what has been done in that particular field for the benefit of those who have entered the field later, or whose studies lie outside.

I do not think there will be time to speak of the great mass of non-literary documents which form the main bulk of the papyri discovered in Egypt. They are counted now by hundreds of thousands, they cover a stretch of a thousand years, they contribute infinite details to our knowledge of Graeco-Roman life, law, and economics, they have written a new chapter of palaeography. Yet their interest cannot be so general, nor their importance so great, as the accessions to our knowledge of Greek literature which have come to us from a numerically small minority of the papyri, and it is of these that I wish mainly to speak.

First, let us get some idea of the general extent of the field to be covered. I do not like to guarantee exact accuracy of figures, especially

since I have not been able to keep my records fully up to date during the last eight, and especially during the last three years. But you will not be far wrong in setting the total number of Greek literary papyri, extant and published, at about 920. In size they vary from rolls 30 feet long to scraps of the dimensions of a postage-stamp; in quality they range from an ode of Sappho to three or four mutilated lines of a perfectly well known work, or an unintelligible and almost illegible fragment of some work unknown and unidentifiable. Yet from some points of view, as I hope to show, even the smallest of these fragments has a certain value.

Let us first analyse these figures a little more closely. Of these 920 papyri, about 570 contain portions of texts already known to us; about 350 contain texts which are new. Of the known texts, about 100 are Biblical or (in a few cases only) patristic; and about 270 are Homeric. That leaves only about 200 specimens of the known classical authors in general, of whom the commonest are Demosthenes with some 30 representatives and Plato with about 20. Aeschylus is almost unrepresented, and Sophocles is in little better case; but Euripides occurs some 10 times in the list, besides 11 portions of his lost dramas. This, it may be observed in passing, is much what one would expect; but it is surprising to find that, while Thucydides and Xenophon are fairly well represented among the extant papyri, Herodotus has so far appeared very rarely and in very insignificant scraps. Of the philosophers, Plato was evidently a favourite, as is but natural; but Aristotle is almost unknown. After Demosthenes, Isocrates is the most popular of the orators, and Hyperides enjoys the distinction of having been restored to our knowledge from the papyri in no less than six substantial orations. Some extensive fragments of Lyxias are promised for the next Oxyrhynchus volume.³ Aeschines just makes an appearance, but no more. No other author appears sufficiently often to require mention, though there are somewhat substantial portions of the *Rhetorica ad Alexandrum* and of Nopius, the latter himself an Egyptian poet.

I do not propose to go at length here into the question of the effect of the evidence of the papyri on the textual criticism of the Greek classics. It has, I think, been sufficiently shown (1) that the texts of the Greek classics current in the second and third centuries after Christ, and even in the second and third centuries before Christ, were substantially the same as the texts that we have now; (2) that modern criticism has generally been right in determining which among the extant vellum manuscripts, on which our present texts depend, are the best, but has often gone too far in pinning its faith exclusively to these authorities; (3) that modern critics (if the papyri are to be trusted) are seldom felicitous in the detection and emendation of corruptions, except in the smallest and most obvious cases; (4) that some corruptions which unquestionably occur in our present texts are of very early date, and have held their own through many centuries during which ancient Greek was a spoken language. With these propositions apparently well

³ Now just published (1919).

established; and confirmed by each succeeding discovery and publication, we may, I think, read our classics to ourselves in confidence, but shall proceed to emend them with diffidence; and these conclusions, I take it, will be comforting to most of us.

Let us turn now to the 350 papyri which contain texts previously unknown. The more important among these are, of course, the great prizes of the Egyptian lucky-bag, really valuable accessions which our knowledge of Greek literature has obtained from papyri. There are some twenty which may fairly be ranked in this class, and they cover nearly all the different species of Greek literature. Theology, lyric poetry, tragedy, comedy, history, oratory—all have received notable additions of real literary interest; epic poetry and philosophy alone have so far been unfortunate. Let us look for a moment at each of these classes. Though all these discoveries are certainly known to you, it may be useful occasionally to take stock of the gains that have been made.

Of theology I shall not say much, because it hardly comes within the purview of our Association. But no survey of the papyrus literature would be complete without at least a reference to the two remarkable fragments of *Λόγια* (popularly, but incorrectly, termed *Λόγια*), or Sayings of our Lord, which were found in the rubbish heaps of Oxyrhynchus; with which must also be classed a few fragments of uncanonical Gospels which belong to the same type of literature. The vellum manuscripts of the Gospel and Apocalypse of Peter, and the valuable uncial manuscripts of portions of the Septuagint and New Testament, now in America, though discovered in Egypt, were not, so far as is known, found with papyri, and can hardly be reckoned here. On the other hand, the early fragments of New Testament papyri, now fairly numerous, give us valuable light on the transmission of the text of the Gospels in the first three Christian centuries.

In lyric poetry the new accessions are many and various and of high interest. Least in bulk but not in quality are the few stanzas of Sappho edited by Schubart from some damaged leaves of vellum at Berlin, and the fragments, many in number but seldom admitting of connected restoration, published in vol. x. of the Oxyrhynchus papyri. They give us no complete ode; but they give us several connected lines and stanzas not unworthy of the name and fame of Sappho, and to say this is to say all. *Βαὺδ μέν, ἀλλὰ πόδα.* With these may be mentioned also the Louvre fragment of Alcman, containing three columns of a maidens' chorus, which is practically all that we have of this early and interesting lyric poet. Next come the pæans of Pindar in the fifth volume of the Oxyrhynchus Papyri; and the epinician odes and pæans of Bacchylides in the British Museum. Portions of two dithyrambs and of some of the Olympian odes of Pindar will appear in the next Oxyrhynchus volume, but otherwise the great epinicians are unrepresented. Like Aeschylus, Pindar was too difficult for the ordinary provincial. The pæans, though they recall the style of the epinicians, are less difficult and, it must be admitted, less splendid than the great Olympian and Pythian odes which are the glory of the name of Pindar. Bacchylides, on the other

hand, like Hyperides and like Menander, the recovery of which we owe likewise to Egypt, is among the easiest of Greek authors. His merits are of the minor order—ease, lucidity, a picturesque handling of epithets (often coined for the occasion), pleasant touches of natural scenery, simple moralities which are perilously near platitudes, and withal a Hellenic grace and sense of beauty which redeems everything. Nothing but his direct appeal to men of simple understanding (and such, it is safe to say, were not a minority among athletes and the patrons of athletes) can have saved him from utter annihilation in the competition with Pindar; but the recovery of so large a portion of his poems is a very great gain to our knowledge of Greek literature, a most instructive foil to Pindar, and a serviceable introduction to the study of Greek lyrics. But if we could recover Simonides, we might find there something of the limpidity of his nephew, combined with not a little poetry worthy to be compared with that of their Theban rival.

Timotheus, the last of the new lyric poets in date, is as complete a contrast to Bacchylides as can be imagined. Burne Jones once said, à propos of the Pergamum sculptures now at Berlin: 'Truth is, and it is a scientific induction, that whenever Germans go forth to dig and discover, their special providence provides for them and brings to the surface the most depressing, heavy, conceited, dull products of dead and done-with Greece; and they ought to be thankful, for it is what they like.'

I do not make myself responsible for the permanent truth of this *obiter dictum*, and it is not to be denied that, if the Germans have not hitherto had the fortune to acquire any of the great new literary treasures, they have at least known how to make good use of those which have fallen into the hands of others; but Timotheus might have been made expressly to illustrate Burne Jones' law. So crabbed that even in his own language he must be rather spelled out than read; so forced, contorted, and exaggerated that he is simply not translatable into any other language; so devoid of beauty of idea, of phrase, or of rhythm that it is only by remembering that his verses are but the libretto to a musical composition that we can understand his being tolerated at all; he contradicts in every respect the ideals of Hellenic art and taste. He is a curiosity, a monstrosity, an addition, no doubt, to our knowledge of Greek literature, but an addition such as we may hope, for the credit of Greek literature, will not be repeated.

Of tragedy, unfortunately, there is not much to be said. We have no complete new play, not even a complete new scene; but we have learnt something of three among the lost plays of Euripides. The sixth Oxyrhynchus volume contains considerable fragments of the *Hypsipyle*, enabling us to reconstruct the greater part of the plot, and giving long connected passages both of iambs and of lyric dialogue, which are interesting if not notable. The Petrie papyri gave us a substantial fragment of the *Antiope*. And a vellum leaf at Berlin has a complete speech from the *Cretans*, containing an elaborate defence of herself by Pasiphaë, which is a striking and characteristically Euripidean handling of an obviously difficult situation. Mention

should also be made of the fragments of a play, apparently Sophoclean, on the subject of Eurypylus; but these, though numerous, are very small, and barely a score of lines can be restored with confidence.

Between tragedy and comedy comes the satyric drama, our acquaintance with which, hitherto limited to the *Cyclops* of Euripides (for I refuse to regard the *Alceste* as satyric in any true sense of the term), is notably increased by the discovery of some fifteen consecutive columns in fair condition of the *Ichneutae* of Sophocles. The story is that of the theft of Apollo's cattle by the youthful Hermes. The style has the grace of Sophocles, without his subtlety. The impression is given that the poet did not trouble himself greatly over this class of composition, but was content to produce a passable libretto for a dramatic entertainment which would lighten the strain of a series of tragedies.

In comedy the finds have been more extensive, for here what may be called the obvious discovery has at last been made—the discovery which *a priori* one would have regarded and did regard as the most likely of all discoveries—I mean, of course, Menander. Passages of some length from two of his plays had previously been published, by Nicole in 1897 and by Grenfell and Hunt in 1899; but not until M. Lefebvre's publication, at the end of 1907, of the volume containing four plays which he had himself discovered in Upper Egypt, could it be said that we had the means of forming an independent estimate of Menander's merits. Even now it is not quite easy to judge him fairly. The four plays are, unfortunately, far from perfect. We have about half of one play (supplemented by a vellum leaf from Oxyrhynchus), about a third of another, and smaller portions of two more; though one of these (the *Hepheistopolyn*) is supplemented both by the fragment previously published by Grenfell and Hunt, and by a later fragment of some 120 lines at Leipzig. All (except the vellum fragment of the *Enripetontes*) may be most conveniently studied in the Teubner text by Koerte (1910). A few additional fragments have since been published by Grenfell and Hunt. We are still, therefore, unable to follow out the course of a whole play, and consequently we cannot form a proper judgment as to Menander's management of the plot; but the Lefebvre papyrus does give us complete scenes and adequate specimens of his dialogue, language, and stage management. Some scholars have declared themselves disappointed with the result, and I do not presume to say authoritatively that they are wrong; but to me personally Menander seems to have many merits, which do not diminish with repeated reading. In particular, the plays seem to me to lend themselves well to clever character acting on the stage. They have more brightness and movement than the Roman copies of them, more delicacy of characterization; and they have the grace of style which one expected, though with fewer of those epigrammatic and sententious lines which the extant fragments had led one to anticipate. It is not my business now, however, to undertake a detailed criticism of Menander, but merely to register his reappearance as one of the boons for which we are indebted to the papyri. Whatever be our ultimate judgment, it is at least a gain that

we are able to form a judgment at all for ourselves on the most famous name in the annals of the New Comedy.

In close connection with comedy may be mentioned what is perhaps the most novel and surprising of all the papyrus discoveries, the Mimes of Herodas. Here is practically a new and almost unsuspected genus of literature; and by excellent good fortune the papyrus to which we owe it is in exceptionally good condition, so that we have six of these miniature comedies practically intact, with fragments of four or five more. In calling them miniature comedies I do not wish to prejudge the question whether they were primarily meant for actual representation on the stage. My own belief is that they were not; but high authorities have taken the opposite view. However this may be, we have here some perfectly unique *genre* pictures of Greek life—common life, vulgar life, sometimes sordid life, if you will, but yet life. They are totally without the poetry of Theocritus, but they have a clear-cut, uncompromising realism, which gives them incomparable value. Among all the gifts from the papyri, there is none which has so clearly enlarged our knowledge of Greek literature by the addition of new conceptions.

Two classes of poetry are represented in the seven leaves from a papyrus codex of Callimachus, published in the seventh volume of the Oxyrhynchus Papyri. About 90 lines of elegiacs contain the story of Acontius and Cydippe, from the fourth book of the *Alfria*, and these are followed by some 300 lines (unfortunately much more mutilated) from his *Ἰαμβοί*. With these may be classed some 60 complete lines and a large number of fragments of the *Μελίμβοι* of Cercidas of Megalopolis, which at any rate give some substance to a poet who was previously only a name.

There remain history and oratory. It is much too late in the day to revive the discussions which accompanied the appearance of the most discussed, perhaps the most sensational, of the new papyri, the *Ἀθηναίων Πολιτεία* of Aristotle. I say 'of Aristotle' advisedly, for I believe it to be as truly the work of Aristotle as any of the other works that pass under his name; though I am far from claiming for it equality of importance with his greatest works. But it has unique value, first, in its historical section, as a representation of a view of Athenian history different from that of Herodotus and Thucydides, and probably a view more popularly and generally current; and secondly, in its descriptive section, as a first-hand account of Athenian institutions which at once supersedes and greatly amplifies the second-hand authorities on which we have hitherto been dependent. It is unquestionably a find of the first grade of importance.

As for our other new historian, the historian of Oxyrhynchus, what are we to call him? It is difficult to see with what right one can give the name of Theopompus to a work which is the antithesis of all we know and all which tradition has handed down to us as to the style of Theopompus. Yet when scholars of the rank of Wilamowitz and Meyer propound this identification, one cannot be surprised that it was adopted by the first editors, though no one has stated more clearly than they the arguments which tell

against it. We may, with Mr. Walker, assign the work to Ephorus, a more probable though not fully convincing conclusion.¹ If we call him Cratippus, we have at least the advantage of a name without connotation, which will not suffer by being associated with what, it must be confessed, is a somewhat lifeless and uninteresting narrative, though not without features of importance. If the portion of him which has come to light had related to the events of a few years earlier or later, it might easily have been a find of the first value; but here Fate has been unkind.

Still, everything that gives us a wider knowledge of the representations of their own national history which were current among the Greeks is a real gain. We have been so accustomed to regard Herodotus and Thucydides, especially the latter, as the standard histories of Greece that it is not easy to realise that the Greeks of the fourth and later centuries did not look on them in the same light. The popular histories of the day were much rather those annalistic records, often known as *Ἀρχαῖες*, of which the most important were apparently those of Androtion and Philochorus. The former has been suggested as a possible author of the Oxyrhynchus fragment, but with very little probability. Of the latter we have acquired some additional fragments in the commentary of Didymus on Demosthenes, of which a considerable part is in a papyrus at Berlin, published by Diels and Schubart in 1904. It is a portion of the commentary on the Philippics, dealing with four orations, and is of interest partly for its copious citations from Philochorus and other lost historians, and partly for its express attribution of the eleventh Philippic² (the genuineness of which has long been suspected) to Anaximenes. It cannot be said that this discovery does much for the reputation of Didymus himself. It is more to the credit of that inexhaustible commentator's industry than his judgment.

The mention of Demosthenes brings us to the last category to be dealt with, that of oratory. This, as it happens, was the first to be enriched by the recovery of a lost author from the papyri. Hyperides was one of the most popular of Attic orators; he was also one of the easiest; and it is less surprising that his works should be found in Egypt than that he should ever have been lost at all. It is, however, rather remarkable that so many substantial manuscripts of him should have come to light. In 1847 two English travellers in Egypt, Mr. Harris and Mr. Arden, independently obtained portions of a long roll containing three orations, that against Demosthenes and those for Lycophron and Enxenippus—the first (which would have been the most interesting) miserably mutilated, the last quite intact. Nine years later Stobart acquired an almost complete copy of the Funeral Oration, apparently written as a schoolboy's exercise on the back of a used roll of papyrus. The conclusion of the almost unknown speech against Philippides was among the great British Museum haul of 1890; and

¹ This identification gains some support from the fragments of Ephorus published by Grenfell in vol. xii, of the Oxyrhynchus

papyri.

² πρὸς τὴν ἐκστράτην τοῦ Φίλιππου.

in 1892 appeared perhaps the most valuable of all, the speech against Athenogenes, now in the Louvre. We have now, therefore—thanks to Egypt and the papyri—ample means to form an opinion of the famous contemporary of Demosthenes; and here, once again, we find the judgment of the author of the *De Sublimitate*, the most penetrating and original critic of antiquity, fully justified. In eloquence, in passion, in force, in moral earnestness, in all that makes the great, as distinguished from the talented, orator, Hyperides cannot be mentioned in the same breath with Demosthenes; but in ease and lucidity, in grace and persuasiveness, in the simplicity due to consummate art, he is a characteristic Athenian, a worthy successor to Lysias.

So much for the great prizes in the lottery, the substantial additions to Greek literature.* I will not pause to estimate their value more minutely, because I wish to dwell for a few moments on another part of my subject, namely the value of the minor literary papyri, the small fragments which in themselves seem so useless, so merely tantalising. What can be the value of a dozen imperfect lines by an unidentified author? Is even the recovery of half a dozen sentences which we can assign to a definite author (usually because part of it was known before) a matter of any real importance? They are not even passages selected, as in an anthology or in the quotations of later authors, on the ground of their beauty or special interest. They are merely chance sentences without a context, and rarely can give us a new fact or a new idea, or even a striking phrase. Nevertheless, they have a value, not so much individually as collectively, not so much for what they actually contain as for what they prove with regard to the history of Greek literature. Each by itself is little better than useless; collectively, they give us some idea of the character and extent of Greek literature circulating in Egypt, the most important province, from the literary point of view, of the Hellenistic world. It is on this aspect of the matter that I wish to say a few words.

In the first place, the number of them is suggestive. Putting the Christian writers and Homer on one side, the total number of portions of works previously known that have been discovered is about 200; but the total number of portions of unknown works is about 350. In other words, for every single work of Greek literature now extant, two which have since disappeared were apparently extant in Egypt in the early centuries of the Christian era. There is no solid reason for doubting the conclusion thus suggested. The great majority of the papyrus fragments with which we are dealing come from the rubbish heaps of towns like Oxyrhynchus, and belong to the first three centuries after Christ, and a fair number are later still. It

* I should perhaps have added, though it is rather scientific than literary, the long Medical Papyrus which formed part of the British Museum acquisition of 1890, and which contains considerable extracts from the *Interea* which passed under the name of

Aristotle, though actually compiled (according to Galen) by his disciple Menon. It was edited by Diels under the title of *Anonymi Londinensis ex Aristotelis Interea Menonis et aliorum Medicorum Recogitae* (1893).

has sometimes been suggested that in the late Hellenistic, and still more in the Christian period most of the lost classics were already lost, and that the grammarians (and even authors like Plutarch) who quote from them derived their knowledge from epitomes and anthologies. The facts revealed by our census of extant papyri do not confirm this suggestion. If a few provincial towns and villages in a single country possessed so large a number of copies of works now lost to us, what occasion is there for us to limit the possibilities of Alexandria, of Antioch, or of Constantinople? The Greek resident in Egypt in the third century had the opportunity of reading thrice or four times the number of works of Greek literature that have come down to us.

The range of this literature was also very wide. Among the new texts which can be identified with more or less certainty are works of Hesiod, Alcibiades, Aleman, Archilochus, Sappho, Alcæus, Pherecydes, Pindar, Corinna, Epicharmus, Sophron, Simonides, Sophocles, Euripides, Aristophanes, Cratinus, Menander, Philémon, Euphorion, Antiphanes, Lysias, Isæus, Aristotle, Aristoxenus, Hierocles, Sosylus, Chariton, Didymus, Julius Africanus, not to mention Bacchylides, Hyperides, Herodas, Callimachus, Timotheus, Cercidas, who have been described already. The unidentifiable texts include poems in hexameters, tragedies, comedies, mimes, lyrics, histories, speeches, philosophical treatises. Since all these were accessible in central and upper Egypt, there is no reason to doubt that the Alexandrian library, even after the great conflagration in the Caesarian war, really possessed Greek literature in substantial completeness, and that the grammarians and commentators for several centuries had before them the complete works on which they commented, and not merely excerpts and elegant extracts.

There is one comforting reflection to be drawn from this state of things. If all this mass of lost literature was extant in Egypt in the times and places now accessible to the spade of the explorer, there are no limits to what may yet be discovered. Few authors could have been selected as less likely to be restored to us than Herodas and Timotheus; yet restored they have been, no less than Menander and Hyperides, who would have been named as the most likely. No one can forecast the taste of the next dead Græco-Egyptian of literary proclivities whose tomb may be discovered, nor guess what books he may have chosen to take with him to his last bed.

It remains to consider the quality of the lost literature thus partially revealed to us, and its relation to that with which modern civilisation has been acquainted since the Renaissance. Here we are like Virgil's traveller, who

Aut videt, aut vidisse putat, per nubila lunam.

It is hard to judge literature fairly from mutilated fragments. Even when all Germany has tried its hand at restoring them, it is possible to suspect that something has been lost in the process. But on the whole it is the moon and not the sun that we see through the clouds. Nothing in the recovered literature equals the splendour of the best that we have known

before. Hyperides is not the equal of Demosthenes, Bacchylides is not the equal of Pindar: Pindar himself, in his pæans, does not reach the heights of the best of the epinicians. Herodas, Timotheus, Corinna, give us glimpses into new classes of Greek literature which are of the greatest interest; but in charm, in poetry, in genius, we have known greater than these. The familiar paradox of Bacon, 'that time seemeth to be of the nature of a river or stream, which carrieth down to us that which is light and blown up, and sinketh and drowneth that which is weighty and solid' finds no confirmation from these dredgings into the drowned depths of time. We may indeed still believe that in some departments of literature, notably in lyrical poetry, we have lost works as fine as any that we possess; but it is just here that the papyri have hitherto given us least, and consequently it is just here that we have least ground to expect help in the future.

To illustrate this point, let us see what literature is represented among the flotam and jetsam of Egypt, and what is not. Homer, of course, is there in full and overpowering predominance; and we even have glimpses, in the third century B.C., of a somewhat unfamiliar Homer, padded out with superfluous lines and repetitions, the exact process of whose disappearance from our standard text is not yet fully elucidated. But of the Cyclic poems, which might throw so much light on the conditions out of which the *Iliad* and *Odyssey* came into existence, nothing whatever has been found. The Hesiodic school is better represented—not the rural school of the *Works and Days*, but the congeries of traditional mythology hitherto known to us in the *Theogonia* and the *Shield of Heracles*. We have portions of the legends of Bellerophon and Meleager, and we have some decidedly interesting fragments of the story of the Suitors of Helen—notably the lines which explain how Odysseus came to form one of the party, not because he either hoped or wished to carry off the prize, but because he did not see why he should not have a share in the good things that would be going; while on the other hand, as he did not intend to be a serious competitor, he was strictly economical in the complimentary offerings which he brought. It is in the lyrical period, perhaps, that our losses have been greatest; and here the papyri have not done much for us. We have indeed substantial gains in the public odes of Pindar and Bacchylides; but I am speaking now of the private and personal lyric. A few fine lines of Sappho we have indeed recovered; but nothing of Stesichorus, Anacreon, Ibycus, and practically nothing of Alcaeus, Archilochus, or Simonides. Another department of literature in which accessions of knowledge would be very welcome is the Old Comedy. I do not believe that any discovery that might be made would overtop the *Birds* or the *Frogs*; but one would very gladly have some more Aristophanes, or some of the work of his chief rivals, Cratinus or Eupolis. But here all that we have got is a portion of the argument of one of the plays of Cratinus. So too in tragedy, we have no more Aeschylus, and nothing important of the serious work of Sophocles; nor can we yet gratify the curiosity which Plato arouses in us as to the merits of Agathon. In history, we have no trace of Hecataeus on the one hand nor

of Theopompus on the other; unless, indeed, the Oxyrhynchus historian be Theopompus, and even then the fragment does not belong to his great work, the *Philippica*. These (and perhaps one may add some more of the epigrams of Meleager) are the gaps which we should wish to see filled, and in which we might most hope to find something which would rival even the best that we know already. But though, as has been said before, anything is possible, the papyri have not yet held out any hopes of gratifying our desires. On the whole, and quite naturally, it is the later, and generally the easier, authors who seem to have been the most popular among the provincials of Roman Egypt; and among them we have found nothing to displace the previous possessors of the highest seats on the slopes of Parnassus.

We are not called on, therefore, to revise our estimate of the great Greek writers, nor of the general character of Greek literature; but we are called on to welcome the widening of our knowledge and the quickening of our interest in it. And surely this quickening has come at a very opportune moment. At a time when Greek has to fight for its place in the education of our cultured class, it is no small thing that the living interest in it of scholars and men of letters should be maintained and intensified. The discoveries of new texts do not indeed do anything to meet the objections of those who would banish Greek from our curricula because their boys will not read Greek in after life; for those are objections which can never be fully satisfied until a general education is limited to reading, writing, and an acquaintance with the simpler processes of arithmetic, together with a courier's knowledge of French and German. But the new texts do much to meet the criticisms of those who used to complain that Greek scholarship is sterile, a special preserve of pedants who spend their lives in a heavy round of editing and re-editing authors who have been already over-edited in previous generations. It is not merely that they provide new materials for specialists to work on, though it is no small boon that scholarship should be able to test its powers in new fields; but the fresh light thrown upon the familiar authors, the fresh literary questions that are raised, and that affect our conceptions of Greek culture, these give new life to the whole study of Greek literature.

And further, even the indifferent can hardly help being forced by these discoveries, and by kindred discoveries in the sphere of archaeology, to face once more the great fundamental question of the place which Hellas holds in modern European civilisation. The extraordinary vitality of these new poems, histories, orations, wherever they are sufficiently complete to exercise their full effect, proves that the literature of Greece is indeed bone of our bone and flesh of our flesh. The literature of Greece still speaks to us with a living voice, like that of our own classics. It is simply not possible to think away the Greek elements of our civilisation; and I, for one, cannot believe that our civilisation, and especially our literature, could maintain its tone if the knowledge of Greek were confined to specialists who had a particular aptitude for it. It is not only those who can read Plato with their feet on the fender

who derive benefit from an acquaintance with Greek. A traveller who has once visited Paris or Venice has a much livelier understanding of the history of those towns, a keener and more intelligent interest in their fortunes, than one who has never seen them, although his knowledge of them is not to be compared with that of those who have made them their special study. So it is with literature. The boy who has struggled not much more than half way up his public school, and who drops his classics with relief—as indeed he drops his mathematics, his science, his history, and, if he can, his French and German—as soon as he leaves school and takes his post upon an office stool, has yet the key which admits him to an understanding of much that he cannot avoid seeing and hearing and reading. Education should give to boys and girls the keys of as much knowledge, of as many different branches of knowledge, as can be managed in the years available. Time will show which of them he or she can use most effectually; but to take away the key which unlocks the door of the richest literature in the world, the literature which is not only at the base of, but which permeates, our own literature, our philosophy, our history, even our science, is surely to play the part of the scribes and hypocrites, to shut up the kingdom of heaven against men.

But I must not, at this hour, diverge on to this fertile and engrossing subject. The point I wish to press is that the discoveries of Greek papyri which our generation has been fortunate enough to watch have played no small part in strengthening the hands of the defenders of classical education and of humanistic education in general. They have therefore a double claim on the interest of members of the Classical Association, even beyond the intrinsic importance of their contribution to literature itself and to our knowledge of Greek literature. I do not want to exaggerate the value of that contribution, and in the estimate I have given of the principal discoveries I have tried to be as judicial and dispassionate as possible; but on the lowest estimate the gain is great and important. Further, it supplements and corrects the balance of the artistic and archaeological discoveries to which allusion was made at the beginning of this paper. There was at one time a danger lest literature should be neglected for the newer charms and more fertile fields of archaeological research; but the papyri of Egypt have redressed the balance. The interest which was being attracted to potsherds has been recalled to papyri. We have substantial new works of poetry to set against the *Hermes* of Olympia and the *Charioteer* of Delphi; we have new histories to compete with the histories revealed by the excavations of Troy, of Mycenae, and of Crete. And both branches together, literature and archaeology, confront those who would depreciate classical education with ever increasing evidence of the unaging vitality of Hellas. Truly, for all those who love literature and who recognise in Greek literature the highest expression of the human mind, the deserts of Egypt have blossomed as the rose.

F. G. KENYON.

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THE VALUE OF PAPYRI FOR THE TEXTUAL CRITICISM OF EXTANT GREEK AUTHORS.¹

AN excellent survey of the evidence of Greek papyri for purposes of textual criticism together with some cautious generalizations was given by Sir Frederic Kenyon in the *Transactions of the British Academy*, 1904. The following paper gives a sketch of the present position of the question in the light of both his article and the new evidence which has accrued in the last 14 years.

In literary papyri from Egypt the proportion of extant to new texts is very small in the Ptolemaic period (B.C. 323-30), when apart from Homer, Euripides, Plato, and Demosthenes that all too scanty portion of Greek literature which has survived did not yet stand out very conspicuously from the rest in popularity. In the Roman period (B.C. 30-A.D. 284) the proportion of new to extant works represented in literary papyri is more in the direction of equality, while in the Byzantine period (A.D. 284-640) after the general adoption of Christianity there was a rapid decline of interest in classical studies, and by the 6th century not very many lost classical works seem to have been commonly studied in Upper Egypt, from which the papyri come. In 1904 Sir Frederic Kenyon was dealing with 189 papyri of extant works, of which 109 belonged to Homer, 80 to other authors. Now, however, nearly 300 more have to be added, of which about 120 represent authors other than Homer, so that the material for examination is more than double.

The papyri of Homer, who claims over half the whole amount, fall into two classes. There is on the one hand a group of 9 MSS. belonging to the 3rd or 2nd cent. B.C. which are remarkable for (1) containing a number of additional lines not found in the common text, (2) generally at the same time omitting a few lines which are usually read, and (3) having many new variants in lines which are common to the early papyri and the ordinary text. On the other hand the great mass of Homeric papyri from the 2nd cent. B.C. down to the 7th cent. contain the vulgate text in substantial agreement with the vellum MSS. (which date from the 10th cent. onwards),

¹ A paper read to the Hellenic Society, May 7, 1918. The subject has since then been briefly treated by W. Schubart in ch. v. of his *Einführung in die Papyrologie*

(Berlin, Weidmann, 1918), and F. Martin in *Les manuscrits antiques des classiques grecs* (Geneva, Kailig, 1919).

though presenting occasional novelties, of which a few have been accepted by Mr. Allen in the Oxford Homer. The first of the abnormal texts to be discovered was a fragment of *Il.* xi. (P. Petrie i. 3), which has 5 new lines and omits 3 old ones in the space of 36 lines. A Geneva fragment of *Il.* xi.-xii.² has 9 new lines out of 70, and considerable alterations in 5 others. Then numerous pieces of 3 other early Ptolemaic papyri of the *Iliad* (from iii.-v., viii., and xxi.-xxiii.) were found by natives in 1895 and sold partly to me,³ partly to Heidelberg.⁴ Several years later Prof. Hunt and I were fortunate enough to track the source of these fragments (a tomb at Hibeh) and secure the rest of the find.⁵ There are now parts of over 600 lines from these 4 Hibeh papyri so that a fairly good idea can be obtained of the text which they represent. About 10 per cent. of new lines are added, and 2 per cent. omitted. A 1st cent. B.C. fragment of *Il.* xviii. (*Berl. klass. Texte* v. 1, p. 18), containing parts of 17 lines, is remarkable for inserting a new line after line 606 and four new lines derived from the *Shield of Hesiod* after line 608. For the *Odyssey* there are (1) a 3rd cent. B.C. papyrus from Hibeh (No. 23), containing 28 lines of xx., of which 3 are new, and (2) two papyri of the 2nd cent. B.C. (Nos. 695-6 of the forthcoming Part iii. of the Tebtunis Papyri). One of these (*Od.* i.) has 1 new line out of 23, the other (*Od.* iv.-v.) 14 new lines out of 180, or 1 in 13. These are the only Ptolemaic papyri of the *Odyssey*; and while in the case of the *Iliad* papyri with the same number of lines as the vulgate make their appearance side by side with the longer recensions in the 2nd cent. B.C., e.g. P. Tebt. 4, P. Fay. 4, and three papyri (from i., vi., and xxii.) in P. Tebt. iii., the evidence for the normal text of the *Odyssey* in papyri does not yet go back further than the latter part of the 1st cent. A.D. (P. Oxy. 783 from xvii.)

The first discovery of these striking variations in the earliest papyri of Homer led to the advance of far-reaching claims that the Homeric vulgate was really the creation of Alexandrian scholars; but this view was strongly controverted in 1898 by Prof. Ludwig in *Die Homervulgata als alexandrinisch erwiesen*. The objects of that work were to maintain (1) that the early Homeric papyri did not represent the normal pre-Alexandrian condition of the poems, (2) that to judge by a detailed investigation of the Homeric citations in writers of the 5th and 4th cent. B.C. the texts used by them substantially agreed with the vulgate, and (3) that variations in the so-called 'eccentric' texts represented by the papyri had no critical value. Ludwig's views obtained the approval of Sir F. G. Kenyon in 1904; but the Hibeh evidence was then for the most part not available, and the discussion of the question in 1906 in P. Hibeh, pp. 67-75, which opposes several of Ludwig's contentions, has met with a good deal of support.⁶

² Nicols, *Rev. Philol.* xiii, 104.

³ P. Grenf. II. 3-4.

⁴ Gachard, P. Heidelberg, iv. 1.

⁵ P. Hibeh 19-22, from the same 3 papyri and another of *Il.* ii.-iii. P. Rylands 49, a small fragment of xvi. with the beginnings of

8 lines, containing 1 new reading, perhaps belongs to the same find.

⁶ Cf. Murray, *Rise of the Greek Epic*, pp. 302-12; Gachard, P. Heidelberg, iv. 1, pp. 1-7; Schubart, *Einführung*, pp. 91-2.

Briefly the position may now be summed up as follows. In the face of the evidence that all the 3rd cent. B.C. papyri and many of the 2nd cent. B.C. papyri of Homer exhibit striking divergencies from the vulgate, especially in the direction of a longer text, it must be admitted that, if the vulgate existed in the 3rd cent. B.C., it was not yet the prevailing text in Egypt. What evidence is there that it did exist before B.C. 200? Ludwich relies on the citations of Homer in 5th and 4th cent. B.C. authors, because out of 180 verses in all cited by them, only 9-11 are not found in the vulgate, whereas in the papyri the corresponding figure would be about 60. But against this must be set the fact that (1) the distribution of new lines in the papyri is very uneven, and they often have long passages without any additional lines at all; (2) most of the quotations are quite short, and of the 25 authors whom Ludwich claims as supporting the vulgate, only 7 are represented by more than 3 quotations covering 10 lines in all, while 3 of these 7 make citations containing extra lines. One of the most striking is Aeschines' version of *Il.* xxiii. 77-91 with 4 additional lines, and it is very significant that from a Heidelberg papyrus containing part of that passage, he is now known to have been quoting a text which agreed with the early Ptolemaic papyri. Since the text of the papyri was good enough for Aeschines and apparently the author of the Pseudo-Platonic *Alcibiades* ii. which has a quotation from *Il.* viii. with 4 additional lines, to say nothing of Plutarch, who quotes *Il.* xxiii. 23 with an extra line found in the text of P. Grenf. 4, Ludwich's conclusion that the vulgate was already predominant in the 5th and 4th cent. B.C. rests on a very slender foundation. With regard to the character of the new lines inserted, their literary value is certainly not high; for they mostly consist of tags from parallel passages. The only new reading of these papyri which is generally accepted is still $\delta\alpha\delta\epsilon\iota\iota\pi\alpha\varsigma$ (as conjectured by Fick) in *Il.* xxiii. 198 (P. Grenf. ii. 4), which is distinctly better than the vulgate reading $\delta\alpha\delta\epsilon\iota\delta\iota\pi\alpha\varsigma$, because it preserves the digamma before $\iota\pi\alpha\varsigma$. But even Homer sometimes nodded, and since the repetitions are already so numerous in his poems, a few more, though displeasing to our literary taste, may nevertheless be primitive. That the rhapsodes liked them is clear enough. It is moreover not the case that other literary papyri of the 3rd cent. B.C., found with the Homeric, present specially poor texts. On the contrary, taken as a whole, 3rd cent. B.C. literary texts, just like the non-literary documents of that age, decidedly tend to be more correct than those written in later times, when the Greeks who settled in Egypt under the first Ptolemies became Egyptianised. Hence the earliest Homeric papyri, however disconcerting, are entitled to much more respect than they received from Ludwich.

But if the supremacy of the vulgate was not yet acknowledged in the 3rd cent. B.C., and if even its existence side by side with the longer text found in the papyri is not certainly attested before B.C. 200, why did the vulgate prevail in the course of the 2nd cent. B.C.? Formerly I was disposed to admit that it existed before B.C. 200 as a text competing with the longer recensions, but now I am more sceptical on that point. In any

case the Alexandrian Museum must, I think, have been in some way responsible for the predominance of the vulgate; if not for its production. The main objection to that hypothesis is that, as far as our knowledge of the early Homeric critics, especially Zenodotus and Aristarchus, carries us, their readings do not seem to have had much influence on the vulgate, which went on into mediaeval times practically undisturbed. To this, however, it may be replied that though we know, mainly from the scholia on the vulgate, that Zenodotus and Aristarchus tried, but in vain, to eliminate a number of lines from the received text of Homer, we do not unfortunately possess any commentary upon the larger recension; and if the Alexandrian Museum, as seems probable, influenced the texts which circulated in the 3rd cent. B.C., the omission of a number of lines on the authority of the Museum may well have taken place without creating the necessity for the fact to be definitely recorded in the scattered fragments of information about early Homeric criticism which have survived. The hypothesis that the vulgate text of Homer, as we have it to-day, was really an edition, for the prevalences of which the Alexandrians were responsible, will at any rate account for the fact that it is ignored in the papyri of the 3rd cent. B.C., when the text was evidently in a very unsettled condition.

Of Hesiod's extant works the four papyri discussed by Sir F. G. Kenyon are all of the 4th or 5th century. Of these the Vienna papyrus (*Stud. zur Palaeogr.* i. 11), containing 373 lines divided between the *Theogonia*, *Works*, and *Shield*, has a good text, generally supporting the better class of MSS., but with very few new readings of importance. Two modern conjectures are confirmed, Hermann's *ὀδὲ αἰ* for *οὐ γὰρ αἰ* in l. 15 of the *Shield*, and Nanck's *ἐλθέμεν* for *ἐλθεῖν* in l. 432. The Geneva fragment (*Rev. Philol.* xii. 113), containing 38 lines of the *Works*, is chiefly remarkable on account of traces of four additional lines which had apparently been ejected by ancient critics. The Paris fragment of *Theog.* 74-145 (*Sitzungsber. Berl. Akad.* 1887, 809) has some interesting readings, verifying two conjectures (Peppmüller's *ce* for *te* in l. 87 and Guist's *τοῖη* for *οἰά τε* in l. 93), and supporting several quotations against the MSS. P. Brit. Mus. 159 (*Rev. Philol.* xvi. 181), which has 40 lines of the *Theogonia*, is unimportant. Of the six, mostly small, Hesiodic fragments found since 1904, P. Oxy. 873 (parts of 20 lines of the *Theog.*; 3rd cent.), *Berk. klase. Texte*, v. 1, p. 46 (parts of 12 lines of the *Works*; 5th or 6th cent.), P. Soc. It. 15 (parts of 5 lines of the *Shield*; 4th or 5th cent.), and P. Oxy. 689 (the last 15 lines of the *Shield*; 2nd cent.) are also unimportant; but P. Oxy. 1090 (*Works*, 257-89) is valuable not only on account of its early date (late 1st cent.), but for 5 new and sound readings, of which 3 confirm small emendations (263 *βασιλῆς* for *-λεις* or *-λῆες*, 264 *δικέων* for *δικῶν*, 268 *ἐβόλη* for *ἐβόλησ'*). P. Ryk. 54 (*Theog.* 643-56; about A.D. 1) is even earlier, and in l. 656 supports Hermann's *ἔ τοι* in place of *ἔτι*, but the 3 other new readings are of more doubtful value. The Hesiodic papyri as a whole carry back the ordinary tradition from the 12th or 13th cent. to the 4th, since which time it has clearly undergone no material change. So far as the 1st cent. evidence

goes, it exhibits a good many minor improvements upon the text of the vellum MSS., which seems to have been rather damaged in the course of transmission.

The 1st cent. papyrus of the *Ἀθηναίων Πολιτεία* contains three quotations from Solon (41 lines in all) which are known from Plutarch or Aristides. Here there are probably 7 cases in which new readings of the papyrus are right, the most striking being ἀλέην . . . ποιούμενος for ἀρχήν . . . ἐνκεύμενος, and χροιοῦν φυγόντας instead of χρησμοῦν λέγοντας, for which Sitzler had proposed δρησμοῦν φυγόντας.

The lost poems of Pindar occur in several papyri of the Roman period, but apart from a small 3rd cent. fragment of scholia on *Py.* 2 (*Sitzungsb. Berl. Akad.* 1918, 749) which is of no importance for the text, the only papyrus of the extant Epinician odes is the recently published P. Oxy. 1614. This contains parts of about 170 lines from *Ol.* i, ii, vi, and vii (5th or 6th cent.). The MSS. of Pindar, none of which is older than the 12th cent., are divided into two families: the text is generally thought to have been preserved with considerable care owing to the efforts of grammarians, and to have undergone comparatively little change since the 2nd cent., to which the extant scholia are referred, and before which, as quotations show, it was far from fixed. This view is supported by the papyrus, which carries back the evidence for 6 or 7 centuries, and is very close to the text of the best MSS., agreeing somewhat oftener with the Vatican family than with the Ambrosian. An interpolation in *Ol.* ii 29-30 is already present. New readings are scarce, and only one—πατρώι ἄρ τῶνδ' ἔχει in place of πατρώιον τῶνδ' ἔχει in ii. 39-40—is of much value.

With regard to the dramatists, Aeschylus is still unrepresented in papyri, so far as his extant plays are concerned; while those of Sophocles are represented only by a couple of 5th cent. pieces of the *Oedipus Tyrannus* (375-85, 429-41 in P. Oxy. 22, and 56 lines from 688-1358 in P. Oxy. 1369), and three earlier scraps of other plays, one of *Antigone* 242-6 (P. Oxy. 875; 2nd cent.), one of *Electra* 993-1007 (P. Oxy. 693; 3rd cent.), and now one of *Ajax* 694-705, 753-64 (P. Oxy. 1615; 4th cent.). The last has in l. 699 an interesting new reading, Μύρια for Νόρια, which seems to have been known to Suidas, and the *Electra* fragment in l. 995 agrees with a late MS. in having τότε βλέψασα, which is better than the ordinary reading ποτ' ἐμβλέψασα. Much the longest of the Sophoclean papyri is P. Oxy. 1369. The novelties are inconsiderable, consisting of ἐμβλεῦσαι for ἐμβλεῖν in l. 825, and a doubtful confirmation of an emendation in l. 1310, διαπεράται in place of the corrupt διατρέται. But in four places the papyrus agrees with the later MSS. against the Laurentianus, which is a fact of some importance for Sophoclean criticism. The view, which has been widely held and to a large extent influenced Jebb, that L was the ultimate source of the later MSS., has now received its *coup de grâce*, and it is clear that the later MSS. preserve an independent tradition, which is sometimes better than that of L.

Euripides was more widely read in Egypt than the other tragedians;

and there are now 21 fragments from 10 of his extant plays on papyri or ostraca,¹ though many of them are quite small. Of the Ptolemaic fragments the best is the earliest, P. Hibeh 24 from the *Iph. in Tauris*. Two emendations are confirmed, *καρτυχόντες* (Reiske) for *καὶ τυχόντες* in l. 252 and *τῆσδε* for *τῆδε* (Bothe) in l. 1618, and in ll. 587 and 621 new readings of value occur, one of them, *κτείνουσα* in place of *θύνουσα*, nearly coinciding with a conjecture of Maachly *θεινούσα*. The extract from the *Electra* in P. Hibeh 7 has in l. 373 *διπρίσας* instead of *διαλαβών*, one of the words being probably a gloss on the other, and in l. 374 *τῶρα* for *γ' ἄρα* (*γ' ἄρα* Wecklein). A 2nd cent. A.D. fragment of the *Medea* is full of blunders, and the text of P. Oxy. 1178 of the *Orestes* (1st cent. A.D.) is not good. Of the papyri of the Roman period the most valuable are two Oxyrhynchus fragments of the *Phoenissae*. At the end of l. 171 the MSS. have *τίς πρόθεν κυπεῖ*, giving an iambus too much, and editors had generally followed Valcknaer in omitting *πρόθεν*, while P. Oxy. 1177 omits *κυπεῖ*, which is likely to be right. In l. 181 the MSS. again have a foot too much, which is usually remedied by the omission of *ἐπεί*, a correction confirmed by the papyrus, which in l. 226 verifies a slight emendation made by Byzantine scholars on metrical grounds, *ῶ* for *ἰῶ*. Similar corrections of unmetrical passages are noticeable in P. Oxy. 224 l. 1036, *ἰγόντων βοῶν* for *ἰγών βοῶν* (editors had proposed *ἰγών βοῶν βοῶν*), l. 1040, *ἀχᾶς* for *ἰαχᾶ* (*ἀχᾶ* Musgrave), l. 1041, *πῶλεος* for *πῶλεως* (so Porson). With regard to the Byzantine period, the longest fragment of Euripides, containing 270 lines of the *Hippolytus*, exhibits no variants of much importance, but P. Oxy. 1370 of the *Orestes*, besides an interesting new reading, *εὐαλεκτρος* for *ὁμόλεκτρος*, in l. 508, confirms an emendation of Weil in l. 1340, *ἀγ' ὃ τραφεῖσα* for *ἀλλ' ὃ τρ*. The MSS. of Euripides are few (for several of the plays only two) and not very good, so that it is a matter of some interest that the papyri support the received text as much as they do. But in the 3rd cent. A.D. the text seems to have been considerably less corrupt than in the mediaeval MSS.

Aristophanes is in much the same position as Sophocles. Apart from P. Oxy. 856, some late 3rd cent. scholia on the *Acharnians*, which are of no value for the text, the 12 papyri from 9 of his plays are all of the Byzantine period, chiefly 5th cent. The principal fragments are *Berl. Klass. Texte*, v. 2,

¹ Concluding chorus of the *Alkestis*, etc. P. Hibeh 23 (3rd cent. A.D.); *Electra* 367-79, P. Hibeh 7 (late 3rd cent. A.D.); *Hecuba* 700-3, 737-46, P. Oxy. 876 (5th cent.); 1252-80, P. Oxy. 877 (3rd cent.); *Hippolytus*, *Berl. Klass. Texte* v. 2, p. 88 (243-430, 492-515; 6th? cent.), and p. 96 (616-24; 2nd cent. A.D.); *Iphig. in Tauris*, P. Hibeh 24 (85 lines scattered over 174-629; before A.D. 249); *Medea* 5-12, P. Weil (before A.D. 161); 20-6, 57-63, P. Oxy. 1370 (5th cent.); 507-17, 543-60, *Berl. Klass. Texte* v. 2, p. 97 (5th cent.); 710-6, P. Oxy. 450 (3rd cent.); *Orestes* 53-61, 89-97, P. Oxy. 1616 (5th

cent.); 828-43, *Mithell. P. Rara* v. 65 (about A.D. 1); 100 lines scattered over 445-1371, P. Oxy. 1370 (5th cent.); 1062-90, *Ber. Philol.* xix. 103 (2nd cent.); 1313-90, P. Oxy. 1178 (early 1st cent. A.D.); *Phoenissae* 107-18, 128-59, *Glass. Rev.* xviii. 2 (2nd cent. A.D.); 171-84, 220-6, P. Oxy. 1177 (early 1st cent.); 1007-1107, 1126-37, *Mithell. P. Rara* v. 74 (5th cent.); 1617-43, 1664-71, P. Oxy. 224 (3rd cent.); *Rhesus* 48-96, *Sitzungsber. Berl. Akad.* 1887, 813 (4th or 5th cent.); *Thyestes* 876-9, *Berl. Klass. Texte* v. 2, p. 98 (1st cent.).

p. 99 (130 lines of the *Acharnians*, 66 of the *Frogs*, and 16 of the *Birds*), P. Oxy. 1374 (150 lines of the *Wasps*), and a (vellum) fragment with 56 lines of the *Birds* (*Rev. Philol.* vi. 179; 6th cent.).² Quite a number of small corrections made by modern scholars, mainly on metrical grounds, are confirmed. Thus in *Acharnians* 912, where the MSS. have τί δαὶ κακὸν παθὼν, the Berlin papyrus has Bentley's conjecture τί δέ; in l. 917 Kinsley's θρηάλλιδα (θρηάλλιδας MSS.); and in l. 928 Brunck's φερόμενος (φορούμενος MSS.). P. Oxy. 1374 confirms Brunck's emendation γράφομαι for γράφομαι in *Wasps* 576, and Bergh's ἐνέθηκε for ἐπέθηκε in l. 790; while P. Oxy. 1373, which perhaps belongs to the same codex as 1374, supports Blaydes's suggestion ἐέλευν for ἐέλευσ' in *Knights* 1017. In *Birds* 1069 the Paris vellum fragment has δάκετα πᾶνθ' ὄσαπερ, as conjectured by Dissen, in place of δάκεθ' ὄσαπερ; and in l. 1078, where the MSS. have ζῶντα ἀγάγη and Burgos restored the metre by inserting γ' after ζῶντα; it has ζῶντ' ἀπαγάγη, which is probably right; while in l. 1080 it omits a superfluous πῖσι added by the MSS. after δέικνυσσι. But on the whole the papyri of Aristophanes are not very accurate, and are more remarkable for their agreements with the ordinary text where the correctness of it has been unsuspected than for new readings. The two chief MSS. of Aristophanes, the Ravennas and Venetus, receive much more support than the others, and it is noteworthy that several of the papyri, especially P. Oxy. 1374 and 1617, support the Venetus against the Ravennas, which has usually been regarded as superior.

The fragments of Theocritus from Egypt have until quite recently been very exiguous and unimportant,³ and P. Oxy. 1618 is the first serious contribution of that country for the text of the *Idylls*, which is often corrupt, the MSS. being late and poor (K and M, both of the 13th cent., are considered the two best). The papyrus, which contains 180 lines from *Id.* v., vii., and xv., is of the 5th cent., and does not present a very correct text. In v. it supports K against M, but in vii. the opposite tendency is noticeable. In v. and vii. new readings are rare, being confined to vii. 75 αἴτ' ἐφύοντο for αἴτε φύοντα, vii. 112 Ἐβρον πᾶρ ποταμῷ for Ἐβρον πᾶρ ποταμὸν (both easier than the reading of the MSS.), and vii. 92 ἐν ὥρεσι for ἀν' ὄρεα. In xv., however, where the text is much more uncertain, there are several novelties of importance. Chief of these is [τέρυ]σιν in l. 98, confirming Reiske's conjecture for the corrupt σπέρχιν or πέρχην of the MSS. Other valuable readings are ὄχλος ἀλαθέως in l. 72, which seems to account for the variants of the MSS., all corrupt at this point; ὁ κῆρ Ἀχέροντι φιληθεῖς instead of ὁ κῆρ Ἀχ. φιλεῖται in l. 86, μὴ ἀποπλαγχθῆν for μὴ τι πλαρηθῆν in l. 67,

² The other papyri are *Choicis* 1-11, 38-48, P. Oxy. 1371; 36 lines from 177-972, *Berl. Mus. Texte* v. 2, p. 108; 945-1014, *op. cit.* p. 110; 1371-1428, *Hermes* lxxv. 902; *Frogs* 44-50, 85-91, 840-962, P. Oxy. 1372; *Knights* 37-49, 80-95, *Mélanges Nicole* 212; *Knights* 6-13, 1013-7, 1057-62, *Papez* 1226-35, P. Oxy. 1373; *Lysistrata* 433-47, 469-84, *Mé. Nic.*

217; *Poines* 1-50, P. Oxy. 1617.

³ xiii. 19-34, P. Oxy. 694 (2nd cent.); scraps of i., iv., v., xlii., xv., xvi., xxi., at Vienna and Paris (*Wiener Stud.* 1886, 220 + *Mitchell. P.* Rainer II. 78; 5th or 6th cent.); xl. 30-4, xiv. 50-63, *Berl. Mus. Texte* v. 1, p. 56 (7th cent.); scholia on v. 38-49, *op. cit.* p. 56 (1st or 2nd cent.).

αἶθε for εἴ τι in l. 70; λαλεῦσαι for λαλεῦμεν in l. 92. The papyrus is an interesting specimen of a text which stands apart from the existing families of MSS., and was at least as good as that of K. That in the later poems from xiv. onwards the text of Theocritus has suffered considerably since the 5th cent. is now probable, but the earlier poems do not seem to have undergone much change between the 5th and 13th centuries. Fresh light on this subject will soon be thrown by Mr. J. de M. Johnson's publication of the long 5th or 6th cent. papyrus of the later poems discovered by him at Antinoöpolis.

Of Apollonius Rhodius the eight papyri¹⁰ are all small, but in several cases interesting as confirming emendations. Thus P. Oxy. 690 (iii. 727-45; 3rd cent.) has in l. 745 ναυτίλοι εἰς Ἑλίαν with Porson against ναῦται εἰς Ἑλ. of the MSS. P. Oxy. 691 (iii. 908-14; 2nd cent.) in l. 909 has μετὰ with Stephanus for κατὰ of the MSS. P. Oxy. 874 (iii. 263-72; 3rd cent.) confirms Brunek's emendation -σιν ἐλεσθε in l. 263 against -σι νέεσθαι or νέεσθε of the MSS. P. Amherst 16 verso (i. 775-94; 2nd or 3rd cent.) has three new readings, of which at least two, πόλοις κατὰ στίβοις for πώλων ἀνὰ στίβοις in l. 781 and θέρας for πώλας in l. 786, are improvements.

Of Aratus' *Phaenomena*, besides an unimportant 4th cent. fragment of 741-53, 804-16 in P. Brit. Mus. 273 (*Class. Quart.* 1907, I), there is a 1st cent. papyrus containing 160 lines between 642 and 934 (*Berl. klass. Texte* v. 1, p. 47). This is eight centuries older than the best MS., the *Codex Marcianus*, and has a number of new readings, but as a whole is distinctly inferior to that exceptionally good text. Three conjectures, however, are confirmed: Buttman's ἄγουσα for ἰούσα in l. 736, Voss's ἐμπλήσσει for ἐμπλήσει in l. 750, and his φαίνονται for φαίνονται in l. 870. Some scholia on Aratus (*Berl. klass. Texte* iv. p. 54) are valueless.

A 4th cent. fragment containing Oppian's *Halicutica* v. 104-19, 142-57 (*Berl. klass. Texte* v. 1, p. 80), is unimportant, the novelties being only blunders; but a long 7th cent. papyrus (*op. cit.* p. 94), containing 277 lines of Books xiv.-xvi. of the *Dionysiaca* of Nonnus (himself an Egyptian), is of much interest. The mediaeval tradition appears to rest on a single Florentine MS., written in 1280, which is full of corruptions, due in large measure to reminiscences of other passages. The papyrus has a number of new readings which are right (e.g. βεῖθοις for ἐνπέλλοις in xiv. 437, and ἄλλος for καὶ τις in xv. 70), and confirms in a striking manner several conjectures which were not based on similarity of letters. Thus, in xiv. 393, where the MS. has ἀκωκὴν and Graefe conjectured κολώνην, it has ἀκωκὴν corrected to κορώνην, i.e. κολώνην, and then back to ἀκωκὴν, a word which has come in from the end of l. 394. In xiv. 398 the papyrus establishes Graefe's πολυσταφύλω against πολυσταφύλω, and in xv. 87 his οἰνωθέτες for οἰνηθέτες, while in xv. 112 occurs a remarkable reading, ελαῖης in place

¹⁰ ii. 101-10, P. Oxy. 1179 (3rd cent.); iii. 143-61, 173-61, *Hermeros* xxv. 606 (7th cent.); iii. 1665-63, P. Oxy. 1243 (2nd cent.); iv. 77-

90, P. Oxy. 692 (2nd cent.); besides the four which are referred to above.

of Ἀθήνης, as conjectured by Köchly. Γλαύκοιο for Βάκχοιο in xv. 165 is another striking confirmation of a conjecture, this time by Falkenburg; and in the same line Köchly's μαχηταίς for μαχητᾶς is established. Traces of a new line occur after xv. 228, where G. Hermann had supposed the loss of a verse. Altogether, the papyrus is very encouraging in its support of the freedom which has been employed in the emendation of Nonnus.

A papyrus of the 11th, 16th, and 17th fables of Babrius, with a Latin translation, written about A.D. 300 (P. Amh. 26) is inferior to the unique 11th cent. Codex Athous of that author, from which it offers some minor variations; but the 2nd cent. P. Oxy. 1249, containing parts of *Fab.* 43, 110, 118, and 25 in that order, though not providing much in the way of new readings, is important because (1) it shows that Babrius, whom Crusius wished to bring down to the beginning of the 3rd cent., must have written within the 2nd cent., if not the 1st; (2) the alphabetical arrangement of the fables found in the Codex Athous and Amherst papyrus is ignored, and therefore is presumably not original; (3) while the prose epimythia are absent in *Fab.* 110 and 118, the metrical epimythion of *Fab.* 43 is present, so that the question of the genuineness of some of these epimythia requires to be reconsidered.

Of epigrams known from the *Anthology*, parts of 8 occur in papyri, 5 by Meleager in *Berl. klass. Texte* v. i, p. 75 + *Sitzungsber. Berl. Akad.* 1918, 750 (1st cent.), 1 by Leonidas of Tarentum and 1 by Antipater of Sidon in P. Oxy. 662 (about A.D. 1), and 1 by Alcimus of Messene in P. Tebt. 3 (early 1st cent. B.C.). They contain hardly any variants (δορᾷ for δοπαίς in *Anth. Pal.* v. 152; *Sitzungsber.* loc. cit. confirming a conjecture of Pierson; Σπαχιόρας for ἐραπίδας, P. Tebt. 3 in *Anth. Pal.* ix. 588).

A fragment containing *Sibylline Oracles* v. 498-505, 517-23 (P. Flor. 389; 4th cent.) is much more valuable, showing great superiority to the text of both families of the vellum MSS. Thus in l. 500 στεροπήα is clearly right, as against the reading of the MSS. γεροτήα, which has come in from l. 498; and in l. 502 κεῖρε δὲ τὰς explains the corrupt readings of the MSS. κεῖς αἰτὰς and κεῖς αἰτόν. The irrelevant l. 503 κελύμειν δώσαι θεῷ ἀφθίταις βιοτεύειν disappears, and in its place are two new verses, while the inversion of ll. 516 and 517 confirms a conjecture of Gelfcken. In l. 519 ἀφείδωτο is superior to ἀφίπτασε, the reading of the MSS., which is probably a gloss.

To come to prose authors, the longest and probably oldest papyrus of Herodotus is the recently published P. Oxy. 1610, which contains 220 lines scattered over iii. 26-72, written about A.D. 100. The mediaeval MSS. are divided into two main groups, the Florantine, headed by a 10th cent. MS., and the Roman, which is all 14th cent. Stein adhered to the older group, regarding unsupported readings of the Roman family, which had been preferred by Cobet, as conjectures; but Hude puts the value of the two families nearly on an equality. The papyrus, in which the agreements with the older group are nearly twice as numerous as those with the younger, affords a substantial justification of Hude's eclectic method in reconstituting the text. The tendency to attest the antiquity of suspected interpolations,

which is so often exhibited by papyri, is illustrated in two cases; but in ch. 32, where the repetition of the same word *αὐτὰρ* had caused a difficulty, P. Oxy. 1619 omits the word in the third place in which it occurs in the MSS., while modern editors wished to omit it in the second; and in ch. 30 the redundancy of the expression *οὐ πολλὰ μετέπειτα χρόνῳ ὕστερον* is remedied by the omission of *ὕστερον*, while another omission occurs in ch. 72. The other new readings are less important, partly concerning the dialect, in which respect the papyrus is not conspicuously more correct than the MSS. The next longest papyrus, P. Oxy. 1092 (late 2nd cent.), which contains about 140 lines from ii. 154-175, has similar characteristics, standing midway between the two groups of MSS., confirming one commonly accepted emendation (*οἶα* for *οἱ*) in ch. 175, and presenting a few not very striking novelties in the body of the text. In the margin, however, of ch. 102 an alternative version of several lines is given (*οὐτὼς δὲ τισὶν ἄλλοις*) from a recension which has left no trace in the MSS. The other 8 papyri¹¹ are all small, and belong to the 2nd or 3rd cent., except P. Manich (*Arch. f. Papyruss.* i. 471: 1st or 2nd cent.), which has some minor improvements (*ἐσθίε* for *ἐσθῆ* and *ἐλευθερωτέρη* for *ἐλευθεριώτερη*). The main result of the discovery of papyri of Herodotus is to dispose of the view that the families of MSS. represent very ancient recensions, since the division of the MSS. into two groups evidently took place not earlier than the 4th cent. By the 1st cent. the text of Herodotus had reached a condition which, even as regards the dialect, is only slightly better than that recoverable from a combination of the two families.

Papyri have made much more difference to the textual criticism of Thucydides than to that of Herodotus. Up to 1915 there were 18 published fragments, 7 being quite small; a detailed discussion of their relation to the MSS. is given in P. Oxy. xi. pp. 156-64, and 4 more have been recently published.¹² The mediæval MSS. form two main groups headed respectively by C (10th cent.) and B (11th cent.), which after vi. 32 branches off by itself into a number of peculiar readings, so that it has generally been supposed to represent here a different edition. The earliest papyri, which are of the 1st cent., P. Oxy. 16 + 696, 225, and 878, tend to support the C group; but

¹¹ i. 76, P. Oxy. 10; i. 105-6, P. Oxy. 18 and 1244; i. 115-6, P. Manich; ii. 96-8, 167-8, P. RyI. 55; v. 78-82, P. Brit. Mus. 1109 (Viljoen, *Herodoti fragmenta in papyris scripta* p. 44); v. 164-5, P. Oxy. 696; vii. 166-7, P. Oxy. 1375. Cf. P. Ambros. 12 (3rd cent.), from Aristarchus' commentary on i.

¹² i. 11-4, P. Oxy. 1620 (2nd or early 3rd cent.); i. 130-41, P. Oxy. 1245 (4th cent.); commentary on ii. 1-45, P. Oxy. 852 (late 2nd cent.); ii. 2-15, P. Gonçes 257 (3rd cent.); ii. 7-8, P. Oxy. 17 (2nd or 3rd cent.); ii. 11, 35, P. Oxy. 1621 (4th cent.); ii. 22-5, P. Oxy. 878 (late 1st cent.); ii. 59-60, P. (Lissen) 52

(4th or 5th cent.); ii. 63-7, P. Oxy. 1622 (early 2nd cent.); ii. 73-4, P. Oxy. 451 (3rd cent.); ii. 90-1, P. Oxy. 225 (1st cent.); iii. 7-9, P. Oxy. 1623 (5th or 6th cent.); iii. 53-9, P. Oxy. 879 (3rd cent.); iv. 28-41, P. Oxy. 16 + 696 (1st cent.); iv. 87, P. Oxy. 452 (late 2nd or 3rd cent.); v. 32-4, 46, 96-8, 103-5, 111, P. Oxy. 890 (late 2nd cent.); v. 90-3, P. Oxy. 1180 (3rd cent.); vi. 32, P. Oxy. 453 (early 2nd cent.); vii. 38, P. Oxy. 1246 (early 2nd cent.); vii. 54-68, 72-3, 78-82, P. Oxy. 1376 (late 2nd or 3rd cent.); viii. 8-11, P. Oxy. 1247 (2nd cent.); viii. 92, *Weimer Stud.* vi. 116 (7th cent.).

the chief 2nd cent. papyri of the earlier books, P. Oxy. 853, 1247, and 1620, rather support the B group. P. Oxy. 1376 (vii. 54-82; about A.D. 200), which is much the longest papyrus of Thucydides, stands midway between B and C, confirming many of the peculiar readings of B. The effect of the papyri as a whole is distinctly to enhance the value of the B group, which Hude was disposed to place much below the other. Occasional agreements with the later MSS., which are usually ignored, are also noticeable. In the matter of novelties two papyri stand out from the rest. P. Oxy. 16 + 696 has about 20 substantial variants, nearly all of which have been adopted as improvements by both Hude and Stuart Jones. The most striking occurs in iv. 37, where the reading of the MSS. *γνοῖς δὲ ὁ Κλέων καὶ ὁ Δημοσθένης ὅτι εἰ καὶ ὅποσοι μᾶλλον ἐνδύσονται διασθαρραμένους αὐτοῖς . . . ἔπαισαν τῇ μάχῃ* provides one of the worst anacolutha in Thucydides. Here the papyrus omits *ἔτι*, as had been proposed by several editors. P. Oxy. 1376 has 26 new readings in vii., of which at least 8 are right. Four of these confirm conjectures: *στράτεας* for *στρατιάς* (Aemilius Portus), *ῥῆ* for *ῥῶν* (Gertz), an omission of *τε* (Hude) and the omission of *ἀν* in *ὅπως ἀν ἀπολασθῆναι* (Herwerden), and an awkwardly constructed sentence in ch. 68 is much improved by the substitution of *δικαίως ἔπει* for *δικαιώσασαι*. Similarly in the other papyri of Thucydides P. Oxy. 225, by substituting *ἀμυνόμενοι* for *ἀμυνόμενοι* in ii. 90, gets rid of an unsatisfactory construction *κατὰ σέβειν*; and P. Oxy. 1247 in viii. 10 establishes Westermann's insertion of *ἐς* before *ἐπεί*. P. Oxy. 853, a commentary on ii., has 12 new readings in quotations from the first 40 chapters, one of them confirming Hude's conjecture *ἡμῖν* for *ἡμῖν* in II. 9, as also does P. Oxy. 1621, which in II. 6 omits the unsatisfactory *οὕτω*, as proposed by Madvig. P. Oxy. 1620 is remarkable for a number of alternative readings, which are mostly new and in several cases improvements. It is now clear that the tradition of the mediaeval MSS. of Thucydides is decidedly imperfect, and not a few roughnesses of his style are really due to scribes' errors, but on the other hand no extensive alteration of the text has taken place since the 1st cent. Rutherford's theory of large adscripts in iv. due to mediaeval scribes was definitely disproved by P. Oxy. 16 + 696.

The historian, however, whose text has in some respects been most affected by papyri is Xenophon. Of that author there are now 15 published papyri, of which one of the most important is P. Oxy. 463 (about A.D. 200), containing *Anabasis* vi. 6. The mediaeval MSS. of this work are divided into two families, and one of them, headed by a 14th cent. MS. called C, was formerly held to be so much superior to the 'deteriores,' headed by a 15th cent. MS. called D, that the latter were almost ignored. But the papyrus, which agrees six times with either group, stands midway between the two; and the same phenomenon occurs in connexion with the *Cyropaedia*, where the condition of the MSS. is similar. Here a 2nd cent. Vienna papyrus (Mittheil. P. Rainer vi. 1) of v. 2-3 agrees 27 times with CH, 30 times with D; and P. Oxy. 697 of i. 6, ii. 1 (2nd cent.) 22 times with CH, 36 with DF; while P. Oxy. 1018 of i. 6 (3rd cent.) and P. Hawara of iv. 5 (*Arch.*

f. Papyrus, v. 378; 2nd cent.) agree still more markedly with DF. It is now evident that in both the *Anabasis* and *Cyropaedia* the 'deteriores' are as close to the 2nd cent. texts as is the other family, and the extent of the change effected by substituting a mixed text for one based on a single family can be gauged by comparing the recent edition of Marchant, which takes the papyri into account, with those of his predecessors. With regard to new readings, neither P. Oxy. 463 nor another much smaller fragment of the *Anabasis*, P. Oxy. 1181 (vii. 1; 3rd cent.), presents any of interest; and in the *Cyropaedia* the Vienna papyrus is the only one which adds much to the large mass of known variants in the text of that work, while none of the 18 new readings is of great importance. Another long Vienna papyrus (*Mittheil. P. Ruiner* vi. 17) from *Hellenica* i. 2-5 (3rd cent.), has about 32 peculiar variants, of which Marchant adopts 19; but the improvements are not very striking. The papyrus tends to support B (14th cent.), which is considered to be the best MS. P. Oxy. 227 of *Oeconomicus* 8-9 (1st cent.) stands apart from the families of the MSS., which are 12 centuries younger, and has not a very accurate text; but 7 of its new readings are adopted by Marchant, including verifications in 9. 2 of an emendation by Cobet (the insertion of $\gamma\epsilon$ between $\tau\eta\varsigma$ and $\sigma\iota\epsilon\iota\alpha\varsigma$), and of one by Schneider (the insertion of $\epsilon\tau$ before $\epsilon\alpha\delta\alpha\tau\omega$). A Munich fragment of *Ilópo* i. 5-6 (*Arch. f. Papyrus*, i. 473; 2nd cent.) by reading $\sigma\iota\epsilon\iota\alpha\theta\alpha\iota$ instead of $\sigma\iota\epsilon\iota\theta\alpha\iota$ removes a long-standing difficulty; and similarly the small P. Giessen 1 (3rd cent.) in *Symposium* 8, by substituting $\pi\alpha\rho\alpha\rho\eta\sigma\eta\iota$ for $\pi\alpha\rho\alpha\ \tau\epsilon\ \pi\alpha\rho\eta\sigma\eta\iota$, gets rid of a corruption which had baffled all editors. The remaining 5 papyri of Xenophon¹² are unimportant.

Plato was studied in Egypt more than any other philosopher, and there are now 19 published fragments from 12 of his dialogues, besides 2 from commentaries on them. The most remarkable are the 3rd cent. a.c. fragments of *Phaedo* 67-84¹¹ and *Laches* 189-92¹² which, like the contemporary Homeric papyri, vary considerably from the ordinary text. Thus in *Phaedo* 68a $\pi\alpha\lambda\delta\alpha\iota\ \epsilon\pi\epsilon\alpha$ takes the place of $\kappa\alpha\iota\ \nu\acute{\epsilon}\omega\tau$, and in 68c $\epsilon\pi'\ \alpha\upsilon\tau\eta\eta\ \tau\eta\eta\ \alpha\nu\theta\rho\alpha\pi\omega\tau\acute{\omega}\nu$ is found instead of $\pi\epsilon\rho\iota\ \tau\alpha\upsilon\tau\eta\eta\ \tau\eta\eta\ \epsilon\upsilon\phi\eta\eta$. In 3 cases the readings of Iamblichus or Stobaeus are supported against the MSS. of Plato. These early Ptolemaic variants have not, as a rule, been regarded with favour, and Burnet accepts in the *Phaedo* only 8 out of about 70 readings peculiar to the Petrie papyrus, and in the *Laches* 7 out of about 42. The other Platonic papyri are all 1st-3rd cent., the most important being P. Oxy. 843, which contains the second half of the *Symposium*, written about A.D. 200. The three chief MSS. of the earlier tetralogies are B (A.D. 895), T (12th cent.), and W (a Vienna MS., later). The papyrus is, as usual, eclectic in its support of the chief MSS. and Stobaeus, and there are several agreements

¹¹ *Hell.* iii. 1, P. Oxy. 28 (2nd cent.); vi. 5, P. Oxy. 226 (1st or 2nd cent.); *Cyrop.* i. 6-8, 1, P. Oxy. 608 (3rd cent.); *Memor.* i. 3, P. Great. II. 13 (3rd or 4th cent.); ii. 1, P.

Soc. Ital. 121 (1st or 2nd cent.).

¹² P. Petrie I. 2.

¹³ P. Petrie II. 50 + *Hermathion* x. 407.

with the late MSS. New readings are fairly frequent, but most of them are not very convincing. The most valuable contributions are $\epsilon\pi'$ for $\alpha\pi'$ in 201*b*, as in corrections of two late MSS.; the omission of $\kappa\alpha\iota$ in 202*a*, as proposed by Stallbaum; $\delta\alpha\epsilon\eta$ in 204*b* for the meaningless $\delta\alpha$; the omission of $\tau\omega$ before $\kappa\alpha\lambda\omega$ in 206*c*, as proposed by Badham; $\mu\epsilon\tau\epsilon\chi\epsilon\iota$ with Stephanus in 208*b* for $\mu\epsilon\tau\epsilon\chi\epsilon\iota\tau$; $\tau\epsilon\chi\epsilon\iota\tau$ with Hug in 209*a* for $\epsilon\chi\epsilon\iota\tau$; and the addition of $\kappa\alpha\iota$ $\sigma\upsilon$ before $\epsilon\pi\epsilon\sigma\theta\alpha\iota$ in 210*a*. There are also two long papyri of the *Phaedrus*. P. Oxy. 1017 (238-51; about A.D. 200) gives an exceptionally good text with a number of alternative readings from a different recension, one of which, $\tau\omega\varsigma$ for $\tau\omega\tau$ in 239*a*, confirms a conjecture of Heindorf, some reappear in the MSS., others are new. New readings without variants are also frequent, and several of these are likely to be correct—one establishing a conjecture of Cobet, $\delta\delta\epsilon\delta\epsilon\iota$ for $\delta\epsilon\delta\epsilon\iota$ or $\delta\epsilon\delta\epsilon\iota\epsilon\iota$ in 251*a*. The papyrus often preserves the superior reading where either B or T or both (W is not available for this dialogue) go astray. P. Oxy. 1016 (227-30; 3rd cent.) is less striking, but has several good readings which have hitherto rested on inferior evidence or on conjecture, such as $\pi\alpha\upsilon\epsilon\tau\iota$ with Schanz for $\pi\alpha\upsilon\epsilon\tau\iota\varsigma$ in 228*b*, $\sigma\upsilon$ $\delta\epsilon$ $\gamma\epsilon$ for $\sigma\upsilon$ $\delta\epsilon$ $\gamma\epsilon$ or $\sigma\upsilon$ $\sigma\upsilon$ in 230*c*. Both papyri stand midway between B and T. P. Oxy. 1624 (3rd cent.) of *Protagoras* 337-57, like P. Oxy. 1017, has been extensively revised, the corrector showing a marked tendency towards omissions. A conjecture of Heindorf in 356*c*, the insertion of $\alpha\iota$ before $\iota\sigma\alpha\iota$, is confirmed by the first hand but rejected by the corrector, who in 357*a* has a reading that had suggested itself to some early Renaissance scholars, $\pi\omicron\pi\omicron\pi\omega\tau\epsilon\tau\epsilon\upsilon\sigma\iota\varsigma$ $\kappa\alpha\iota$ $\epsilon\gamma\gamma\upsilon\tau\epsilon\tau\epsilon\upsilon\sigma\iota\varsigma$ for $\pi\omicron\pi\omicron\pi\omega\tau\epsilon\tau\epsilon\upsilon\sigma\iota\varsigma$ $\kappa\alpha\iota$ $\epsilon\gamma\gamma\upsilon\tau\epsilon\tau\epsilon\upsilon\sigma\iota\varsigma$. Of the remaining Platonic papyri, P. Oxy. 881 (2nd or 3rd cent.) of *Euthydemus* 301-2 and *Lysis* 208 has a number of small variants, as have P. Oxy. 228 of *Laches* 197-8 (2nd cent.; 4 of its readings are accepted by Barnet, 1 agreeing with Stobaeus, 1 with a late MS.), and 2 papyri of the *Gorgias*, Mittheil. P. Rainer ii. 76 (504-5; 3rd cent.) and P. Oxy. 454 + P. Soc. It. 119 (507-8 and 522-6; 2nd cent.). More valuable than these are the lemmata in the *Theaetetus*-commentary (Berl. klass. Texte ii.; 2nd cent.); but out of 18 new readings the editors only recommend 5 as superior to the MSS., one of these, the omission of $\epsilon\sigma\tau\iota\upsilon$ before $\epsilon\sigma\tau\iota\upsilon$ $\gamma\alpha\rho$ in 152*b*, having been anticipated by Ast. The support given by this papyrus to W against BT is very noticeable. The other Platonic papyri¹⁰ are unimportant. The main results of papyri in regard to the text of that author are to show (1) that W is practically as good a MS. as B or T; (2) the later MSS. have been too much neglected, particularly Vat. 1029; (3) the text of Plato was in a decidedly unsettled condition in the 3rd cent. A.D. So far as the early Ptolemaic papyri go, they vary extensively from the later text, and even in

¹⁰ *Laches* 181-2, P. Brit. Mus. 187 verso (2nd cent.); *Lysis* 12, 582-3, P. Oxy. 23 (before 205); extracts from ii. 832-3, Berl. klass. Texte ii. p. 53 (1st cent. A.D.); *Phaedo* 109, P. Oxy. 228 (2nd cent.); *Politicus* 210-2, P. Oxy. 1248 (2nd cent.); *Republic* iii. 406,

P. Oxy. 455 (3rd cent.); iv. 422, P. Oxy. 456 (2nd or 3rd cent.); 2. 907-8, P. Oxy. 24 (3rd cent.); *De virtute* 376, Arch. f. Papyrolog. v. 579 (2nd cent.). Cf. the extract from *Phaedrus* 263 in Berl. klass. Texte ii. p. 52 (2nd cent.).

the 2nd and 3rd cent. there is considerable evidence for the continued existence of a different tradition side by side with the ordinary text.

The extant works of Aristotle are represented only by a fragment of *Post. Anal.* i. 71-2 (*Philologus* xlv. 21; 6th or 7th cent.), containing nothing new, and one of the *Protrepticus*, most of which corresponds to an extract of this lost work preserved in Stobaeus (P. Oxy. 666; 2nd cent.), and by a small piece of a commentary on *Topics* ii. 2 (P. Fay. 3, early 2nd cent.). The *Protrepticus* fragment sometimes supports one, sometimes another of the three MSS. of Stobaeus, and occasionally corrects them all; the citations from Aristotle in the commentary on the *Topics* offer no variations of interest.

Of a work which in ancient times was attributed to Aristotle, but is now generally assigned to Anaximenes, the *Ῥητορικὴ πρὸς Ἀλέξανδρον*, there is an important 3rd cent. B.C. papyrus, P. Hibeh 26, containing pp. 15-31. The text of this, though not free from scribe's errors, is very greatly superior to that of the MSS., which are of the 15th and 16th cent., and the improvements, which sometimes extend to the addition of a whole clause, are numerous. At least 7 conjectures are confirmed, including 2 elaborate emendations of Spengel, the alteration of *ἰσασί* (or *αἰδῶσι*) τὸ κατηγοροῦμενον to *τιμῶσι*, omitting τὸ κατηγορ., and of *πῶς* to a phrase like *δοὶ μεθυστάνας* (*μεταστατέον* the papyrus). Other emendations of Spengel which are established are *ἡ ἐπ' ἀσθενέσων* for *ἡ ἀσθεν.*, *ταῦτα τὸν τρόπον* for *τὸν τῶν ταῦτ.*, *διέλθωμεν* for *διέλθωμεν*, and *ὁ νόμος* for *νόμος*, besides *τριττῶς* for *περιττῶς* (Bekker). As often, the papyrus tends to support the so-called 'deteriores' almost as much as the better codices.

A small 3rd cent. fragment of a compendium of Theophrastus' *Characters* 25-6 (P. Oxy. 699) does not throw any light on the text of that author, beyond showing the antiquity of such compendia as that in the Codex Monacensis.

Three of the orators are represented by papyri of their extant works. There are 4 long papyri of Isocrates, besides 12 shorter ones; the 4 being (1) a 2nd cent. Berlin papyrus of *Demonicus* 18-52, collated by Drerup in his recent edition; (2) a Marseilles papyrus of *Nicoles* 1-30 (*Mélanges Grécus* 481; 3rd or 4th cent.); (3) P. Brit. Mus. 132 of the *De pace* (*Journ. of Phil.* xix. 1; 1st cent.); (4) P. Oxy. 844 of *Panegyricus* 19-116 (2nd cent.). Of the rest only P. Oxy. 1095 of *Demonicus* 40-6 (4th cent.) and P. Oxy. 1183 of *Truperciticus* 44-8 (1st cent.) need concern us.¹¹ The 10th century Codex Urbinas, which is held to be greatly superior to the other MSS., sometimes obtains more support than the rest, especially in the *De pace*, where P. Brit. Mus. 132 agrees 123 times with it and 54 times with the others. But Isocratean papyri as a whole are conspicuous for their

¹¹ The others are *Demonicus*, extracts from 39, 41, 50-1, P. Berlin collated by Drerup (2nd or 3rd cent.); 45, *Hecyrus* xxv. 897 (2nd cent.); 50-3, P. Aurb. 25 (1st or 2nd cent.); *Nicoles* 2-4, *Mittheil. P. Briener* ix. 136 (4th cent.); 8-11, P. Chilings. Eib. 1 (3rd cent.);

47-51, P. Soc. Ital. 16 (5th cent.); *Panegyricus* 199, and *De Pace* 1-3, P. Oxy. 1090 (4th cent.); *Philippus* 114-7, *Mittheil. P. Briener* ii. 74 (1st or 2nd cent.); *Sophist* 16-8, P. Oxy. 794 (3rd cent.); *Antidosis* 83, 87, P. Oxy. 27 (1st or 2nd cent.).

coincidences with the so-called inferior MSS., especially the papyrus of the *Nicoles*, which agrees with them 19 times against the Urbina and not once with the Urbina against them, and that of the *Trapeziticus*, which 12 times supports an 11th cent. MS. called Δ against the Urbina and only once the Urbina against Δ . Several of the papyri, notably those of the *Demonious* and *Panegyricus*, have a number of variations from or additions to the ordinary text; but few of these have been regarded as improvements, and the latest editor of Isocrates, Drerup, still adheres to the supposed almost complete infallibility of the Urbina. It is, however, increasingly difficult to explain the superiority of that MS. on the hypothesis that it really gives the oldest and purest text. The other MSS. present a text for the antiquity of which there is just as much evidence, and the quotations of Isocrates in Dionysius of Halicarnassus indicate that in the 1st cent. B.C. the text was not settled. The Urbina is more likely to owe its excellence to the editorship of some grammarian than to the sole possession of an uncorrupted tradition. The main principle on which Drerup is constructing his text seems to be rather antiquated.

Demosthenes, as might be expected, was the most widely read in Egypt of all the prose authors. There are now 35 fragments, dating from the 1st cent. B.C. onwards, representing 14 of his speeches with the *Hoplum ênarrhōpikā* and *Letters*, besides 5 fragments of commentaries or lexicons; but only 8 of them are of much length. The MSS. of Demosthenes are numerous, about 200 being known, and 7 or 8 of these go back to the 10th or 11th cent., the Paris codex S being pre-eminent. They are classified by Butcher into 4 main families, which are all considered to have been ultimately derived from one archetype, chiefly because the 32nd oration (*Zenothemis*) breaks off at the same point in all of them. The date of this supposed archetype is uncertain: Blass assigned it to the 5th or 6th cent. S and its descendant or relative L are distinguished by presenting a shorter text, and it has been maintained, especially with regard to the *Third Philippic* and *Midias*, that there were two ancient editions, one longer than the other; while even in S considerable interpolations have been suspected, Blass going much further than Butcher in his rejections. Of the *De corona* there are 3 important papyri, besides 7 of no special value.¹⁰ The earliest, P. Oxy. 1377 of the 1st cent. B.C., contains only 27 lines from §§ 167-9, but is noticeable for exceeding S in its omissions, though these are not always justifiable, and for an agreement with Tiberius against the MSS. (*τὰ ἀναγκασιότατα*; S1' om. *τὰ*; αὐτὰ τὰ ἀναγ. the rest). P. Oxy. 230 (40-7; 2nd cent.) is a longer fragment and supports S, especially in regard to its omissions, though not going so far as Blass. P. Ryk. 58 (267-94; 5th cent.) is longer still, but is rather late and presents a mixed text, not consistently agreeing with S or any other MS. It too is prone to omissions, but most of these can hardly

¹⁰ § 1, P. Ryk. 58 (3rd cent.); 7-8, P. Oxy. 230 (1st or 2nd cent.); 230-1, P. Oxy. 464 (3rd cent.); 25-8, P. Oxy. 462 (3rd cent.); 706 (2nd or 3rd cent.); 308, P. Oxy. 23 (3rd cent.); 163, 169, P. Ryk. 57 (3rd cent.); 227-9, P. Oxy. 231 (1st or 2nd cent.); 230-1, P. Oxy. 464 (3rd cent.); 25-8, P. Oxy. 462 (3rd cent.); 706 (2nd or 3rd cent.); 308, P. Oxy. 23 (3rd cent.).

be defended. Of the *De fals. leg.* there are 5 fragments. *Journ. Philol.* xii. 247 (§§ 11-32; 2nd cent.) by no means always supports S, and has several differences from all the MSS in the order of words; but apart from these new readings are scarce (13 in number), and Butcher adopts only one, *τοῦτο* for *ταῦτα* in § 21. P. Oxy. 1182 (53-7; 2nd cent.) also presents a mixed text; the only novelties are 2 additions of an explanatory character by a corrector, which seem to be of the same class as the supposed interpolations in the MSS outside the SL family. P. Oxy. 1094 (274-5, 279-80; 5th cent.) is again eclectic, and of inferior quality; one emendation of Dobree in 280 (the omission of *καί*) is confirmed, but apparently not another which had been usually accepted (*ἐξ ἐκείνων* for *ἐκείνων*). The remaining two papyri of this oration¹⁹ are unimportant. Except the *Timocrates* with 3 fragments, none of the other speeches is represented by more than 2.²⁰ The most interesting are P. Oxy. 1093 (2nd cent.), a long papyrus of *Boeot.* 7-23, which agrees with S not much more than with some of the other MSS and has no striking novelties, and P. Oxy. 459 (3rd cent.) of *Aristocr.* 110-9, which in several places has additional words, perhaps interpolations. A solitary scrap of the *Third Philippic* 38-40, 43 (P. Fay 8, 2nd cent.) agrees twice with S in regard to omissions, the missing words (*συγγράμα τοῖς ἐλεγχόμενοις*) being in one place supplied by a corrector with the addition of *ἐν τοῖς τοῖς*. The lemmata in the Berlin commentary of Didymus upon *Phil.* iv., *De epist. Phil.*, and *Περὶ συρράξεως* (2nd cent.) have 9 new readings, of which one (*περιεργάζεσθε* for *περιεργάζεσθαι*) had been anticipated by Blass, and two others are probably right, and 7 agreements with S compared with 6 with the other MSS. More remarkable than these is P. Oxy. 26 (2nd cent.) of *Προίμια δημογορικὰ* 26-9, which has a distinctly good text, introducing several improvements: in 26 *βεβουλευμένον* for *μὲν βουλευμένον*, *κοινῶς* (as conjectured by Wolf) for *κοινῶς*; in 29 *ταῦτ' δὲ τοῦτο* for *ταῦτ' δὲ τοῦτο* (*ταῦτο δὲ ταῦτο* Reiske), *ἐν* for *ἐνταῦθα*. But the most valuable papyrus of Demosthenes, so far as novelties are concerned, is P. Brit. Mus. 133 (1st cent. B.C.) of *Third Epistle* §§ 1-38. This has many improvements, and verifies no less than 10 conjectures: 9 *ὅσον* for *τὸ ὅσον*, 27 *τιν'* for *τῆς*, and 31 *Εὐθυδικον* for *Εὐδικον* or *Εὐδηνον* (Blass); 22 *ἀγνώστ'ι* for *ἀνρόποντι* (Dobree), 22 *ἀδικεῖσθε* for *ἡδικοῖσθε* or *ἀδικεῖσθαι*,

¹⁹ § 10, P. Græf. B. 9 (1st or 2nd cent.); 293-3, P. Tell. 267 (2nd cent.).

²⁰ Besides the 6 described there are *Olynth.* II. 10, 13, *Class. Rev.* vi. 430 (1st or 2nd cent.); *Phil.* i. 20-9, P. Osmia 3 (5th cent.); 35, 1, 5, P. Anh. 24 (4th cent.); *De Pace* 2-9, P. Soc. 1183, 129 (4th cent.); 21, 23, P. Oxy. 460 (2nd or 3rd cent.); *Aristocr.* 149-50, P. Oxy. 883 (2nd cent.); *Arctoph.* i. 47-8, P. Oxy. 882 (2nd cent.); i. 63-7, Brit. Mus. Add. 22473 (2) collated by Butcher; 5th cent.; *Boeot.* 50-3, P. Oxy. 792 (2nd cent.); *Lep.* 78, *Class. Quart.* 1907, 263 (late); 84-90, Wilkins, *Papiri eae ant. grieci. Palaeogr.* i.

(2nd cent.); *Méd.* 41-2, *Proc. Soc. Bibl. Arch.* xv. 86 (4th or 5th cent.); 131-4, P. Oxy. 1378 (3rd cent.); *Phoen.* 3-7, P. Græf. B. 10 (2nd cent.); *Timocr.* 53-5, P. Oxy. 232 (2nd cent.); 63-5, P. Oxy. 701 (2nd or 3rd cent.); 143-6, 150, P. Oxy. 233 (3rd cent.). Cf. the commentaries on *Méd.*, Kenyon, *Alexander Nabataea*, vol. 2, App. L. (late 1st cent.), and *Andriod.*, *Hermes* xlv. 374 (1st or 2nd cent.), and lexicons to *Méd.*, *Andriod.*, *Palaeogr.* iv. 111 (4th or 5th cent.), and *Aristocr.*, *Brit. Mus. Texts* i. p. 78 (4th cent.).

and 25 οὐδείς for οὐδεὶς ἄν (Sauppe); 28 δ' ἐν for δὲ (Reiske); 30 παρπῖους for παρπῖους (Wolf); γενέσθαι for γενήσεσθαι (Fuhr); 38 an insertion of εἰς (Bekker). The text of the *Epistles* has evidently suffered much more in transmission than that of the speeches. With regard to the latter papyri, while confirming on the whole the superiority of S, indicate that the other MSS., especially F (the Marcianus; 10th cent.), cannot safely be neglected; and that whereas the shorter readings tend to receive more support from papyri than the longer, Blass went too far in rejecting supposed interpolations, as he certainly applied too rigidly the rules of euphony to Demosthenes and other orators.

The text of Aeschines is in a bad condition, all three families of MSS. being of poor quality. Only one MS. is earlier than the 13th cent., and that by a curious phenomenon belongs to apparently the worst family of the three. Hence of the 8 fragments of Aeschines from Egypt, all except two¹¹ are decidedly valuable. The longest is P. Oxy. 1625 (2nd cent.) of *In Ctesiphontem* 14-27, which presents a number of new and better readings. Thus in § 20, where two of the three families have an omission and the third is corrupt, having καὶ τῶν ἐκεί σκυθρωπῶν καὶ τῶν μεγίστων κύριον ἄγειν, it verifies Lambinus' emendation τὰς ἐκεί σκυθρωπῶν and Wolf's ἀγειν, but not the more elaborate changes proposed by later editors. A gloss which had found its way into the MSS. in § 15 can now be detected, and another which is found in two of the three families is absent from the papyrus. Hamaker's conjecture ἐπὰ for γέα in § 17 is confirmed, and Cobet's objection to the repetition λέγει . . . φησὶ in § 21 is justified, though by the omission of φησὶ, not λέγει as he proposed. A passage in § 10, in which variations between present and past participles had caused a difficulty, is set right, and there are several alterations in the order of words. P. Oxy. 703, a small 3rd cent. fragment of §§ 94 and 96 of the same speech, has 3 new readings, which are all probably right, one of them confirming a conjecture of Kaibel, ζῶντων for ὁπόντων in § 94; while in § 167 P. Oxy. 457 (2nd cent.) similarly has several improvements (ἐνστήσασθαι for ἐνστήσαι; προσκαθ[ι]ζέ[σ]θαι, which Lobek and others had proposed, in place of the corrupt προσκαθίζε[σ]θαι, προσκαθεστήσθαι, etc. of the MSS.; and ἄγας προσποιήσας for προσποιήσθαι). The longer but much later vellum fragments of §§ 178-86 (Hartel, *Vorträge über die Griech. Pap. Erz. Rom.* 45 sqq., 5th cent.) also provide some minor improvements. In this speech the tendency of papyri is to support the group of MSS. called by Blass A more than B and C, which had been generally considered inferior to A. In the *Contra Timarchum*, where A is wanting, a 2nd cent. Geneva papyrus of §§ 171-81 (Nicole, *Textes grecs inéd.* 1) and P. Halle 6 (2nd cent.) of 177-8, 181-2, 184-5 agree with B rather oftener than with C, but on the whole, like the other papyri of Aeschines, present a mixed text, ignoring the lines of subdivision in the MSS. Both are remarkable for their numerous divergences from the ordinary text. In the Geneva fragment the principal improvements are

¹¹ *De fide leg.* §§ 21-30; P. Oxy. 458 (3rd cent.); 74-5, P. Oxy. 440 (3rd cent.).

ισχυρίζεσθαι (with Wolf) for δυσχυρίζεσθαι, ἐξαιρήσεται (with Blass) for ἐξαίρεται, the insertion of αὐτὸν between ὑπολάβετε and ὄραν, ἔχετε for ἔχετε, τῶν ἀδικημάτων ὀργίζεσθαι for ἡγνεσθαι τῶν ἀδικ., προαισθάνεσθαι καὶ ὀργίζεσθαι, τοὺς μὲν νόμους (with Cobet) for τοὺς νόμους μὲν. Both papyri have τὸ αἴτιον for τὰς ταύτων αἰτίας, τοὺς μὲν νόμους (again with Cobet) for τοὺς νόμους μὲν, ἐπὶ πᾶσι δικαίοις (with Hillebrand) for ἐπὶ πᾶσι τοῖς δ., οὐτε κέρδους ἀδίκου ἔνεκα for κέρδους ἔνεκα ἀδίκου (or ἀδίκου) and P. Halle 6 also has probably κατηγοροῦν, as conjectured by Blass, for κατηγοροῦντων, and ὁ γὰρ νόμος οὐ for οὐδὲ γὰρ ὁ νόμος, which is inferior. The text of Aeschines has evidently undergone considerable deterioration in the process of transmission since the 3rd cent.

Of the prose-writers of the Alexandrian age, Polybius is represented by late 2nd cent. fragments of xi. 13. 8-16. 7 (*Arch. f. Papyrusf.* i. 388 + P. Ryf. 60). This papyrus is notably superior to the MSS. and confirms as many as 13 emendations: 4 by Casaubon (15. 7 θῆρος for τέλει, 16. 3 insertion of γὰρ, 16. 5-6 insertion of τὸ before προσηγμένον, and τὸ δυσχοῦστον for τὴν δυσχ.), 2 by Scaliger (14. 2 προσθεῖναι for προθεῖναι, and 16. 6 διαβαλεῖ for διαβάλλει), 2 by Schweighäuser (16. 2 om. τοὺς before ἐπερδεξίον, 16. 6 and 7 ἐν πορείᾳ for ἐμπορείᾳ), 1 by Ursinus (15. 5 θεωραίας for ἀρακίας), 1 by Arceus (16. 1 ἐπάγειν for ἐπάγει), 1 by Gronovius (14. 2 the insertion of παρὰ τὴν τῶν ἡγουμένων before ἐμπειρίαν), and 1 by Reiske (καταβάσκει for καταβαίνοντες: the papyrus adds προσβαίνοντες).

The prose-writers of the Roman age are represented in papyri chiefly by the writers of *Romances*. There are two papyri of Chariton's *Chaereus and Callirhoe* (ii. 3-4 in P. Oxy. 1019, and iv. 2-3 in P. Fay. 1; both late 2nd cent.), and a vellum palimpsest (viii. 5-7, *Arch. f. Papyrusf.* i. 227; 7th cent.?). The received text depends upon a single 13th cent. Florentine MS. and both papyri are on the whole very close to it, though providing a number of variants which are generally superior. Thus in ii. 3 φόβου δὲ ποθεν αἰσθημένη D'Orville's conjecture ποδῶν for ποθεν is confirmed. The palimpsest varies more extensively than the papyri from the Florentinus, and seems to represent a different recension, which is sometimes longer, sometimes shorter. Wilcken, editing it before the publication of the papyri, regarded both it and the MS. as shortened recensions of the original Chariton; but the papyri, which are much closer to the author's lifetime, rather support the view that the Florentinus, though faulty, has not undergone much editing. That the recension found in the palimpsest is as old as the other is not proved.

Of Achilles Tatius' *Clitophon and Leucippe* 2-9 there is an early 4th cent. papyrus P. Oxy. 1250, which resembles the Chariton papyri in its characteristics, exhibiting many small discrepancies with the mediaeval MSS. and in most cases being manifestly superior. Two conjectures, Jacobs's τότε τὸν γὰρ Διόνυσον for τότε γὰρ τὸν Δ. and Boden's προσέθηκεν for προσέθηκεν, are confirmed, and three unsolved difficulties are set straight by the readings ἐκλεῖπον for ἐκ Λακείας, μαζοί for ἰμαξα, and the insertion of πλυσίων after τῶν βοτρίων; but the drastic methods of Hercher in dealing

with the text meet with no support. A novel order of the chapters is striking, chs 2 and 3 1-2 being inserted between chs. 8 and 9, while, since the rest of ch. 3 would not fit the end of ch. 1, there must have been some modification at that point also. This divergence in regard to order is to be explained by supposing either that there were two redactions of this romance, or that a leaf of the archetype of the MSS. was displaced and the dislocation concealed by subsequent patching. Incidentally the papyri of Chariton and Achilles Tatius have revolutionised current views about the date of the composition of Romances. Formerly the writers of these were assigned to the 5th or 6th cent.; but the evidence from the date of the actual papyri proves that Chariton wrote before A.D. 150 and Achilles Tatius before about 300.

I pass briefly over the writers on mathematics and medicine. Of the two short papyri of Euclid, P. Fay. 9 (2nd cent.) is remarkable for its variations from the ordinary text of i. 39 and 41, and P. Oxy. 29 (about A.D. 300) also has some peculiarities of arrangement in ii. 5. P. Oxy. 1184 (early 1st cent.) and to a less extent two 2nd or 3rd cent. Berlin papyri (*Berl. klass. Texte*, iii.) illustrate the instability of tradition concerning the pseudo-Hippocratean *Letters*, which appear in a longer or shorter form and in varying order. A small 2nd cent. papyrus of the pseudo-Hippocratean treatise *Περὶ διαίτης ὁρίων*, P. Ryl. 58, supports none of the three chief MSS. at all consistently, and occasionally differs from them all. Small 2nd or 3rd cent. pieces of Hippocrates' *Aphorisms* i. 1 (*Studi d. scuola pap. di Milano* i. 3) and *Epidem.* iii. 1 (P. Soc. Ital. 116) are unimportant; but a 4th cent. fragment of Soranus' *Gynaecia* ii. 2-3 (P. Soc. Ital. 117) has some notable variants from the unique 15th cent. Paris MS., besides supplying part of one of the two lacunae in ch. 3. Wellmann's conjecture *Ἀθηνίων* for *Ἀθραίων*, Rose's insertion of *τὸν περὶ* between *ἐν τῷ α* and *γ* and *τῆς αἰδέσεως*, and Ermerins's correction *καὶ Ἀριστοτέλην καὶ Ζήνωνα τὸν Ἐπικούρου* for *καὶ Ζήνωνα καὶ Ἀριστοτέλην τὸν Ἐ.* are confirmed. A small fragment of Dioscorides, *Περὶ ὕλης ἰατρ.* iii. 136-7 (*Class. Quart.* 1907, 263; date ?) presents a recension which differs widely from the MSS.

The main general conclusions of this survey may be stated as follows. Firstly, on a broad view the result is to some extent reassuring, though less so than it was in 1904, when Sir F. G. Kenyon wrote. The text of the chief prose authors can now be traced back to the 1st or 2nd cent., a few (Plato, and to a slight extent Demosthenes) even beyond; and it is clear that after A.D. 1 they were substantially the same as the text of the mediaeval MSS. Even where the latter are or seem to be wrong, the errors are often shown by papyri to be of long standing, due to quite early corruptions. That papyri written within a century of the date of composition of the work in question were anything but faultless is shown, e.g., by a fragment of Julius Africanus (P. Oxy. 412), which, though less than fifty years later than the composition of the *Kerai*, is already rather corrupt. But theories of extensive corruptions due to mediaeval scribes, such as Rutherford's hypothesis of adscripts in Thucydides and Blass's strict application of the rules

of euphony to the orators, are either put out of court altogether or rendered very improbable. With regard to the poets the evidence is generally slighter, and except in the cases of Homer, Euripides, and Apollonius Rhodius, hardly extends further back than the 4th cent. With respect to Pindar, Sophocles, Aristophanes, and Theocritus the conclusion to be drawn from papyri is not that the existing texts of these authors are sound, but that until Ptolemaic or at any rate Roman papyri of them are forthcoming not much is to be expected in the way of improvements.

Secondly, when evidence of 3rd cent. B.C. papyri is available, as it is only in the case of Homer, Plato, the *'Πρωτική πρὸς Ἀλέξανδρον*, and to a less extent Euripides, a condition of texts is revealed which is widely different from that which prevailed after about B.C. 150. The early Homeric and Platonic papyri vary extensively from the mediaeval MSS.; the papyri of the other two authors less so. The longer text represented by the early Homeric papyri is from the point of view of literary excellence considered to be inferior to the vulgate, and the early Platonic papyri have been similarly vilipended, but with less justification in view of (1) the subsequent discovery of 2nd cent. Platonic papyri also containing many new variants, some of which are superior to the received text; (2) the distinct superiority of the early Euripidean and *'Πρωτική πρὸς Ἀλέξανδρον* papyri to the mediaeval MSS. It is in any case clear that the text of Homer and Plato was before about B.C. 150 in a very unstable condition, and Alexandrian scholarship was in some way responsible for fixing it in the form in which it is found in later MSS. The text of several other authors may well have passed through a similar kind of crucible. The outstanding excellence of particular MSS., such as the Clarkianus of Plato, the Parisinus of Demosthenes, and the Urbinus of Isocrates, is rather to be explained as the result of an edition than as the consequence of a specially faithful reproduction of the earliest text.

Thirdly, except in the case of Homer, papyri still cover only a very small part of the whole text of the chief extant authors, and within this limited area they often, especially in the 4th-7th cent., present a text which is no better or even worse than that of the vellum MSS. in spite of the difference of age. But there are by this time many papyri which are decidedly superior to the MSS. The authors most affected by their new readings are Plato, Thucydides, Aeschines, and in general writers outside the first rank. Conjectural emendations, especially those involving much change, rarely obtain confirmation; but, though the percentage of guesses proved to be correct is small, scholars can claim the verification of many conjectures in the emendation of some authors, particularly Thucydides, Aeschines, the *Epistles* of Demosthenes, the *'Πρωτική πρὸς Ἀλέξανδρον*, Apollonius Rhodius, Babrius, Nonnus, and the writers of Romances.

Hardly less important for textual criticism than the new information which is provided by papyri of extant classical authors is the light which they throw on the right method to be employed in dealing with the old material. There are two ways of procedure. One is to follow in the main the authority of that MS. or group of MSS. which seems to represent the best

tradition; the other is to steer a middle course between opposing groups, and not to take any one of them at all consistently as a guide. The second method throws greater responsibility upon the textual critic by giving him more scope for indulging individual fancies, and an eclectic text is liable to be arbitrary, especially when the age of MSS. and their relationship to each other are imperfectly realised, as happens in most of the older editions of the classics. Hence modern scholarship has largely tended in the direction of the first method, that of taking one MS. or group as a guide. Of course this method is much more applicable to some authors than to others: in the case of, *e.g.*, Euripides, Theocritus, and Aeschines, authors of whom the MSS. are late and poor, any reasonable text is bound to be of the nature of a compromise between various families. But with Aeschylus, Sophocles, Plato, Isocrates, and Demosthenes in particular, and to a great extent with Herodotus, Thucydides, and Xenophon, the tendency has been to rely almost exclusively on a single line of tradition, though there are some notable exceptions, *e.g.*, Hyde's Herodotus and Marchant's Xenophon. On the merits of these two methods the papyri (inconveniently, no doubt, from the point of view of those who would like to see the text of the Greek classics finally settled) speak from the oldest to the youngest with no uncertain voice. They show clearly that the eclectic method is right. The family divisions in the vellum MSS. which editors with natural ardour have often identified with known or hypothetical ancient editions, are really of comparatively late origin, and do not reach back to the papyrus period, which ends in the 7th century. In practically all authors the papyri are found to be in frequent agreement with the so-called 'inferior' MSS., and the 'better' have no kind of monopoly of ancient and correct readings. Future editors of authors such as Sophocles, Thucydides, Plato, Isocrates, and Demosthenes will have, as was already pointed out by Sir Frederic Kenyon, to be prepared to find the truth in witnesses which usually are inferior, and to follow the example set by Mr. Marchant in his Xenophon of exercising a comparatively free judgment in deciding between conflicting MSS. in place of a strong bias towards a particular group.

Papyrology has hardly been in existence for more than 30 years, but its results in the domain of textual criticism are of considerable importance, though they are apt to be obscured partly by the more brilliant light shed by the recovery of many lost classical texts, partly by a natural prejudice against rather disconcerting novelties in a well-ploughed field. Egypt, as far as promising sites for the discovery of literary papyri are concerned, shows signs of exhaustion; but when the rest of the Oxyrhynchus collection and all the unopened Ptolemaic papyrus-cartonnage at Oxford and various museums on the Continent come to be published, the value of the contribution of papyri to the textual criticism of the Greek classics, which has greatly increased in the last 14 years, is likely to go much higher yet.

B. P. GRENFELL.

ADMETUS, VERRALL AND PROFESSOR MYRES.

Admetus. You lose your temper with Admetus because he doesn't want to die. Have you ever died yourself?

Wieland. None but cowards are afraid of death.

Admetus. The hero's death, true. But death is one's bid? Everybody is afraid of it, including the hero. It's unsure. Do you suppose I would have fussed about my life if it had been a question of saving my wife from the enemy or defending my property? Still, for all that...

Wieland. You are like people from another world, talking a language whose words I understand, but can't make out the sense.

Admetus. We are talking Greek...

Euripides. Wieland belongs to a sect which tells tortured men that they will live a fuller, happier, stronger life after they are dead.

Admetus. He is behaving as if he did. But no, he is human enough to act like me, if he were in my shoes.

Alceste (to Wieland). You just ask your wife about that.

Goethe, Götz, Holten, and Wieland, 1774, vol. xxviii, in the Weimar edition.

MANY people have failed to understand the *Alceste*, and for the reasons Goethe suggests. Romanticists are grieved because Admetus, Phereas, and Hercules are human beings. As M. Masquigny observes, 'Notre hypocrisie s'accommode mal d'une telle franchise.' Verrall is delighted that the characters should be human beings, but refuses to permit them to 'talk Greek.' His 'rational' theory that the object of Euripides was to 'expose' the marvellous legend, by suggesting that Alceste never died at all, rests on an assumption that, to an Athenian, the resurrection of the heroine, 'as a piece of history, asserted or denied,' was a matter of religious moment. But, for a Greek, the truth of the alleged resurrection involved no vital issues. The first lesson of religion was not 'Believe that Apollo, through Hercules, could raise Alceste from the dead, and, believing, have faith and hope,' but something very different: 'Know that thou art mortal, and, being mortal, practise moderation.' It was the unorthodox, the 'progressive' who, in ancient Athens, ventured to believe that mortal men should 'practise immortality.' Euripides contributed to new ideas by criticising the old. But his task was as far removed from that of Verrall's 'Professor T. H. . . . ' as was the mind of Nikias from that of Mr. Gladstone. For an ordinary Athenian the point was not that Alceste rose from the dead, but that she died to save her husband's life. To argue the possibility or impossibility of her resurrection would, I submit, have appeared to the Athenian as trivial as it is depressing. If we want to understand Greek plays, we must remember

that they were written by Athenians for an audience which was pagan, not Christian, Greek, not English. The characters talk Greek. It is our business, before we begin to criticise, to ascertain exactly what they say.

What, for instance, are we to think of Admetus' hospitality to Heracles? Verrall regarded it as a proof of callousness, and discovered 'unanimity of condemnation among the *dramatis personae*.' But how did he arrive at that discovery? By ignoring the natural meaning of Greek words, the natural significance of perfectly familiar proverbs. He had every right to point out that the first instinct of the chorus, when they hear Admetus inviting Heracles to enter his house, is one of horrified amazement. But he is driven to strange shifts when the hero's explanation swiftly, and to a Greek quite naturally, converts the chorus. In an ode, whose beauty he admits, they recall the hospitality of Admetus to Apollo and the blessing that followed. They compare that famous example of piety with their master's present sensitiveness to the claim of friendship, and express a certain hope that piety will again have its reward (660 ff.):—

τὰ γὰρ εὐγενὲς ἐκφέρεται πρὸς αἰδῶ.
ἐν τοῖς ἀγαθοῖσι δὲ πάντ' ἐνεστὶν σοφίας. ὕψισται,
πρὸς δ' ἐμῇ ψυχῇ θάρασος ἔσται
θεοσεβὴ φῶτα κεδνὰ πρύξιν.

For Verrall, this becomes: 'It is a part of good breeding to tend exceedingly to the point of honour. Upon the noble all virtues rest. It is amazing; but we have a settled conviction that the god-worshipping man will fare well and do well.' By a series of slight inaccuracies or ambiguities, he has contrived to make the chorus appear puzzled, instead of impressed. 'They are making the best,' he says, 'of whatever Admetus chooses to do.' And 'at this point, sentence upon Admetus' conduct remains in suspense.'

To an Athenian such an interpretation would have seemed preposterous. Αἰδώς, for a Greek, is the sum of orthodox virtues, and it is identical with that 'wisdom' which brings true prosperity.¹ It has a perfectly definite content. 'It is from health of mind,' the Eumenides tell us, when they are laying down the fundamental precepts of Greek morality, 'that the prosperity, which all men love and all men pray for, comes.' And they define true wisdom thus: 'Therefore let a man be modest-minded (*αἰδόμενος*), observing well the reverence that is due to parents and entertaining guests with honour in their houses.' And again, when they talk of sinners, they are not vague in their catalogue, but specify as typical criminals 'all who have sinned against a god, a stranger-guest, or their parents.' When you invoke blessing on a Greek city, you pray that it may 'deal justly with stranger-guests, honour the gods, and reverence parents: for that is the third of the prescripts of justice.' Sometimes, it is true, the proverb is slightly varied, and you are told that the three essential virtues are 'to honour the gods, and

¹ *Arach.* *Eum.* 338, 348, 280; *Sop.* 709; *Eur. Herac.* Fr. (N. 853). The equation *αἰδίαθαι σοφία*, *Eur. I.A.* 563, has dramatic

importance for that play. For the dramatic importance of *σοφία* here, see *Al.* 303, 327, 552, 565, 728, 779, 1093.

the parents that got you, and the common laws and customs of Hellas.' That form of the ideal is worth remembering at *Alkestis*, line 684.

As for *ἀγαπᾶν*, which Verrall contrives to turn into a protest, it is really an expression of the deepest respect and admiration.² It is the word with which the cunning Odysseus flattered Nausicaa when he assured her that the sight of her filled him with awe. It is the right word for the expression of admiration for a soldier, who braves death for his country's sake. And it is the word that Plato uses when he wants to describe the wonder of the gods at the heroism of Alkestis herself—a wonder which made them do for her 'what they have done for very few mortals—send back her soul from death.' And, finally, the settled conviction that a good man will prosper is so commonplace a proverb that we need not embark on controversy whether a Greek could have interpreted *κείνῳ* *πράξει* in a Verrallian sense.

Noblesse oblige. It is the virtuous who are possessed of wisdom. 'I am full of wonder and respect, and am persuaded that so god-fearing a man will meet his reward.' It is the chorus, not Euripides, that speaks. But it is important accurately to determine what is said. It is important for this reason. In drawing the character of Admetus, Euripides has given him, in complete harmony with the legendary tradition, the typical virtues of the old Greek aristocratic ideal. He is proud of his birth and sensible of its obligations. He is pre-eminent for *Αἰδώς*. That is, he is a man who honours the gods, for which he has his reward, a man who has honoured his parents, as he himself remarks, but has not received from them the somewhat extravagant return which he, and the tradition, expected; and finally a man who is noted for punctilious observance of all the claims of friendship. He is a typical good man; but, in spite of all, being, like ourselves, a human being, he has much to learn. The central interest of the play is not a problem about resurrection and miracles, but the education of Admetus to a new and better view of life.

I say, advisedly, a better view of life; not simply a new view of matrimony,³ though Professor Myres is justified in laying great stress on that aspect of the play.

² *Id.* vi, 161-168; *Eur. Phoen.* 1042, *Illec.* 242; Plato, *Symp.* 170a.

³ See Myres in *J.H.S.* 1917, pp. 196 ff. Though I agree with much that Myres says, I do not think the motive of Alkestis is to avoid remarriage. Alkestis dies in order that Admetus may live; and that makes all the difference, when she asks him not to marry again. The request is abnormal, but Myres does not explain *Hip.* 828-832, where Thesmos expects just the same request from his dead wife. Perhaps he would say that Thesmos was old and Admetus young. But the real test of his argument is in lines 170-181, where Myres paraphrases, but does not quote. For the sake of greater accuracy I

have obtained a copy of Euripides. Alkestis says: 'ὦ ἄνθρωπε . . . | χεῖρ' οὐ γὰρ ἐχέλευσ' ἀνδράσιν ἔ' εἶ | ἄλκιον ἐποθέσθαι γὰρ α' ἀνδρῶν καὶ νέων | ἀνδρῶν' αἱ δ' ἄλλα τοι γυνὴ στερήσεται. Myres paraphrases: 'For her married life she has no hard thought. Tragic as it has been for her, it has at least brought disaster to no one but herself; and it has only brought it to her because, for her, remarriage would have been intolerable betrayal of her truth to Admetus.' But why not paraphrase thus: ' . . . It has only brought it to her, because, for her, a refusal to die for her husband, when one or the other had to die, would have been intolerable betrayal of her truth?' *ἄνθρωπε ἐποθέσθαι* suggests adul-

The legend said that Alcestis nobly volunteered to die for Admetus, and orthodox sentiment paid her the tribute of an easy admiration. 'A model wife, indeed.' Euripides, by bringing the story down to earth, by making the characters human beings, with motives, prejudices and passions like those of his contemporaries, forces his audience to face the implications of the phrase. If women can be like that, if a wife can die for her husband, will not the man whose life she has purchased with her own, find all his notions, all his feelings about marriage and about women, revolutionised? It is through the devotion of Alcestis and his gradual realisation that she means more to him than all external moralities, more than his prosperity, more even than life itself, that Admetus becomes human. Yet the play is more than a tract for husbands, more even than a plea for a better understanding and a more worthy relation between men and women. It touches something universal which can still appeal to us who think, at any rate, that we have, as a society, absorbed the lessons about marriage and about women which were revolutionary novelties to Athens. The legend held that Admetus was peculiarly virtuous, and was rewarded by the gift of an extra span of life. I think Euripides suggests that the morality which calls Admetus 'happy' because his life is prolonged at the cost of another person's sacrifice, is superficial. He suggests that the person who sacrifices may be more fortunate than the beneficiary. Life, as Alcestis says, is esteemed more precious than anything else. But, before the play is done, Admetus knows that there is something more precious than life, and that that something is indeed what alone makes life worth having.

This reading of the play enables us to see the relevance of the scenes which puzzle both romanticists and rationalists. The prologue, the choral odes, the scenes with Hercules and Pheres, fall into their proper place, as part of a concerted whole. But always we must remember that Euripides is working with old mythology and old proverbial morality as his material.

The prologue begins, as we should expect, with a hint of the fundamental problem. The foundation of Greek religion, as we have said, is the doctrine

tery) but that does not imply what Myres wants. She does (to put the phrase at its highest) because she refuses to do something which for her would amount to as great a betrayal as adultery. What? An Athenian audience would naturally suppose she meant 'refusing to die for him,' not 'marrying again.' Myres treats 157 as an indication that Alcestis must have expressed 'a point of view' . . . new, surprising, quite incomprehensible to the Maid. Is he not treating *ἀσπράδα* as Verrall treated *ἔγχαρι*? And does *ἔγχαρι* suggest 'the expression of a point of view, etc.'? I submit that line 157 refers to the whole of Alcestis' behaviour, as narrated. It seems to me sufficiently sublime. Finally, in his anxiety to make Alcestis' request as

abnormal as possible, Myres paraphrases lines 300-302, *αἰσχροπαί γὰρ εἴ' ἄρα τις ἀβρογὰς* *ἔσται γὰρ σέβει δὲν ἐμάρτυρος*, into 'It is a very big thing that I am about to ask of you, Admetus; almost as big as what I am about to do for you.' Would he paraphrase II. ix. 491, *ὅς γὰρ θεὸς θυγὼν*, into 'The wealth of Ilion is almost, though not quite, as much to me as my life'? In 227 he waters down *ἔσται γὰρ σέβει δὲν ἐμάρτυρος* (which he prefers, for some reason, to *ἔσται . . . ἀσπράδα*) into 'accidents (of course) apart.' But it means 'if he continues to be in his right mind' (*εἰ ὁσπέρῃ*). Later, it is true, when the first emotion is over, the rational man, Hercules, will regard fidelity as *μωρία* (1003).

of mortality, not immortality. Men are mortal, and therefore should be moderate in expectation, in desire, in conduct. They are fortunate if they live their normal span without calamity. And yet men hanker after the impossible—*τὰ μὲν γὰρ ζητοῦντες*. It is to remind us of all this that Apollo tells us, at the outset, how he first came to the house of Admetus as a punishment for rebellion against what seemed the arbitrary cruelty of Zeus. Zeus killed Asclepius because he raised men from the dead; Apollo killed the Cyclopes, who had fashioned the thunderbolt for Zeus. And so Apollo was condemned to serve a term of ordinary human life. Euripides knew what he was about when he began his play with this reminder of an earlier rebellion against destiny. The ways of Death are hateful to gods and men. But Death's defence of himself states a fact whose realisation is, for a Greek, the beginning of wisdom (63):

οὐκ ἂν δύναιτο πᾶντ' ἔχειν ἢ μὴ σε δεῖ.

Again and again Death insists on Justice.⁴ Apollo prophesies that Heracles will rob Death of his prey, but, not before, Death's arguments have reinforced in our minds the mention of Asclepius. Men cannot expect the decrees of fate to be altered in their favour without compensations. There is really something in Death's point of view.

But the chorus, like most of us, hanker after the impossible. They know the terms of Apollo's bargain, yet they hope against hope that something may intervene. They cry to Paean (92). They know that all the gods have been approached in vain (120, 132). There is no help to be had from the oracles of Lycia and Egypt (112). And yet, they cannot help recalling, Asclepius raised men from the dead—until the thunderbolt of Zeus put a stop to it (127). Again and again, throughout the play, these ideas are repeated in various forms, with various modifications. They are part of the lyrical machinery by which the requisite atmosphere is created for the human drama.

When we are introduced to Admetus we shall find that he, too, is asking for the impossible. His first words voice the protest against mortal destiny which Apollo championed when he killed the Cyclopes. 'What have the gods against us?' he complains, 'that Alcestis should die?' The appeal to justice is characteristic of the man. But he forgets. The gods have given him not less, but more, than they give to most men. He is to live beyond his time if Alcestis dies. He begs Alcestis to beseech the gods for pity (251), and in the same breath, inconsistently, he begs her to 'rouse herself' and live. At that point he is not asking her to revoke her decision and let him die. He does something like it at line 275, but even then the terms of his appeal are neither happy nor convincing:

σοῦ γὰρ φθιμένης οὐκέτ' ἂν εἴην.

⁴ Though the scene has folkloric elements serious. There are many reminiscences of (Lawson, *Modern Greek Folklore*, p. 113), it is Bain, 631 ff.

No doubt, says destiny. But where will you be if she lives? He has not clearly faced the situation. His distress is genuine enough. But, as the Maidservant has told us, 'he does not know, until he shall have suffered.' He simply 'begs her not to betray him' (precisely what she is dying to avoid, 180)—*ἐπιμήχανα ζήτῳ*.

This does not imply that he is particularly selfish, certainly not that he is contemptible. Simply, he is conventional and unimaginative. When Alcestis makes her great request, that, for the sake of the children and for her honour, he should not marry again, she puts it on grounds which, she knows, will appeal to him. What she asks is less than what she gives, but 'just—as you yourself will say.' She knows how Admetus regulates his life by the great rules. It is the way of a good man. His assent is eager, not reluctant. Then he begins to reflect. He proves to himself how small the sacrifice will be. His protestations are extravagant, but not insincere. They show that still he does not understand. So Alcestis ignores everything except the promise not to marry again. She dies, and her last word to him is *χαίρε*, 'I wish you joy.' It is the little boy, not Admetus, who breaks out into lamentation. Anyone who has witnessed the Bradfield performance knows the value of that fact.

So Alcestis is dead, and we embark on the sequel, which has seemed to so many interpreters unworthy of the prelude. 'Time will assuage; the dead is nothing,' Alcestis has told him (381). Will that prove true?⁵

After the silence, the chorus offer customary consolation, an orthodox admonition to patience. 'You needs must bear your troubles. You are not the first. You must recognise that death is the debt which all of us must pay.' True, but on this occasion the ancient consolation sounds inadequate. On this occasion someone else has paid. But Admetus will behave as a good man should. He acknowledges mortality. He is prepared. He has suffered in anticipation. And having giving instructions for the public mourning, he goes off to make his preparations for the burial.

When he comes back he finds Hercules at his door. What is he to do? Shall he drive his friend away because of his private grief? Intolerable to a man whose life is devoted to *Αἰδώς*. But if Hercules is to be entertained, he must not be told the truth. In virtue is wisdom; and, calculating unimaginatively as is his wont, Admetus can persuade us that to turn his friend away would simply add an evil to the present sorrow. And that is forbidden by *Αἰδώς*. Yet I think we are intended to feel that there is something too mechanical about his virtue. The first instinct of the chorus is right. If his heart spoke, and not his virtuous head, Admetus would tell his friend about the trouble. But he does not tell him, and so he has to talk in riddles. What has not been observed is that the ambiguities reveal, in spite of that virtuous head, a heart that is beginning to break. When he says, of his wife,

ἔστιν τε κοῦκέτ' ἔστιν ἄλγιστοι δ' ἐμέ,

⁵ See 1085-6.

HP. *χρόνος μελέγει* . . .

ΛΔ. . . . *οὐ χρόνος τὸ κατὰ φύσιν.*

is he not realising that the dead are not always dead? Is there no bitter discovery behind the sophistry of *τέθνηχ' ὁ μέλλων*? And, when Heracles insists on the plain man's distinction between 'is' and 'is not' the answer seems to me to be more than an evasion:

σὺ τῇδε κρίνεις, Ἡρακλεῖς, εἴωνι δ' ἐγώ.

Alcestis is still with him, working on him. But the suggestion that Heracles will go to some other house rouses him like a blow. His melancholy falls away. An actor should deliver line 539 with violence. After that, *τεθνῶσι*, for the present, *οἱ θανόντες*. But we have already seen that Admetus has a heart.

He has, but his self-complacency remains. For himself, as for the chorus, he is still the model of Hellenic virtue. It is at this point that the chorus celebrates his noble birth, his rightmindedness, his possession of the wisdom that is virtue, his piety, which will surely bring him good. Both Admetus and the audience need a shock before their eyes are opened. And a shock they are to have from Pheres.

One part of *Alḗōs*, and an important part, is the honour due to parents. But the parents of Admetus have betrayed him. They ought to have died for him. Alcestis herself could not understand their selfishness. With characteristic generosity she said, 'some god has brought it about that things should be as they are' (297). Her thought was more generous and more profound than Admetus could understand. He could see nothing but the betrayal. All he could answer was that he would hate his parents, as a proof of loyalty to her. As if she wanted that! He had not heard, and would not have understood, her language when she said 'My marriage bed, . . . I bear you no ill-will, for you have brought disaster to no one else but me' (179).

Admetus thinks it monstrous that these old people, having had their fill of happiness, should cling to life. Though the poet has, in my opinion, left ambiguous the precise degree of responsibility, or lack of responsibility, of Admetus for his wife's sacrifice, he has left no doubt about the parents. Admetus canvassed them, expected them to volunteer. That is in accordance with the normal view of the Greek tradition.* The originality of the Pheres scene consists not in the indictment of Pheres, but in his presentation as a real person, with something to say, something which is disquieting to all of us, who assume that we are so much his superiors. Euripides makes us feel his reality, and his kinship with Admetus, and ourselves. When we condemn Pheres, are we so sure that we should act differently in his place? And Admetus, by condemning him, implies that he is prepared not only to

* The normal Greek view is expressed in the drinking song which, Eustathius tells us (*Il.* ii. 711), used to be sung at Athens: 'Ἀδμήτου λόγον δ' οἶσιν παῖδες, τοῖς ἑσθλοῖς φίλοι, τῶν θεῶν δ' ἄνδρες, τρεῖς ἐνὶ δαίμον ἄλκιυ χέρι.' Plato, *Symposium* (179a): Alcestis

consented to die for her husband, *ὅταν αὐτῷ παῖδες τοὶ καὶ ἀνδρες, οἱ ἐσθλοὶ τοσοῦτος ἀνταλλάξον τῇ φίλῃ* . . . *ὅταν ἀνδράσι αὐτοῖς ἀλλοτρίων ὄναι τῷ αἰεὶ καὶ δίδρασι μόνον προσήκοντα.*

accept, but to demand as a right, a sacrifice which no man has a right to ask from another. Pheres is base to refuse. We may dismiss, if we will, his accusation that Admetus is a murderer. It is, on any interpretation, a calumny. But, for all that, he lays bare the soul of Admetus. At heart Admetus, the *αἰδοῖος*, is *ἀναιδής*. He prides himself on justice. Well, he claimed his parents' lives, in order that he might himself escape payment of the debt that all men owe (contrast 682 with 419, 782). Pheres intends to behave with what he considers decency. The pious platitudes with which he offers consolation recall, point by point, the sympathetic admonitions of the chorus. From the chorus Admetus could accept them without perception of their irony; but from Pheres, these same proper sentiments are intolerable. No wonder Admetus launches on his indictment. He harps on justice, *αἰδώς*, *εὐγένεια*. As against Pheres it is a good enough case. It is true enough, 'if death comes near, nobody wants to die.' Does Admetus? Did not Alcestis? The reply of Pheres is not only a brilliant exposition of his own egoism, but also a revelation of Admetus to the audience. It stings, precisely because of the hard core of truth beneath the malice. And in the long run it helps to break Admetus' heart. For the present his reaction is one of righteous indignation. He renounces his parents, in language of characteristic peevishness (737, cf. 425 ff.). Pheres deserves it, but the man of *Αἰδώς* is committing the last impiety. His righteous indignation will pass. On the road towards Larissa, at the tomb, and on the way back, he will have to face himself. He will have to come to terms with the problem set by Pheres:

ἢ δ' οὐκ ἀναιδής· τῇδ' ἐφ' ἧς ἄφρονες ἄφρονα,

Every point in Pheres' *rhesis* touches on the traditional excellence of Admetus. Is the appeal to justice? Does Admetus plead that he has always done his duty by his parents? It is not Greek, it is not among the rules, that a father owes his son his life.

Admetus feels the pride and obligation of birth. Well, this creature, who is his father, also has a sense of birth. He is no slave, and claims the treatment due to his position. When a Pheres makes this claim, we feel how little it matters; and when Admetus returns from the grave we shall find that the nobility of birth, which counted for so much to him, has dwindled into insignificance (920 ff.). 'Do you rejoice in living, and do you think your father has no joy in it?' We remember how Alcestis bade Admetus rejoice. 'Be silent, and reflect that, if you love your life, so all men do.' When Admetus comes back from the burial, he will cry, 'I envy the dead: I am in love with death.' Admetus cares much for his reputation.²

² The Homeric hero fought and died for fame. Admetus' great anxiety for reputation is not contemptible. Good fame is more to a Greek, and ill fame more nearly approaches guilt, than we moderns generally admit—though here again, perhaps, 'notre hypocrisie s'accoutume mal d'une telle franchise.' If

you care to realise what good fame means in Greek, read Walter Rieu's essay (C.R. xix, 1905, p. 149) on Pindar, *Nesk.* vii, 32 ff. Green, as he shows, inspired Milton when he sang: 'Fame is no plant that grows on mortal soil. . . . But lives and spreads aloft by those pure eyes! And perfect witness of

That too he is to lose (961). It is the cynical admission by Pheres of contempt for reputation (720) which moves Admetus to cry out against the shamelessness of the old. That a man has a right to one life not two, is true enough. But it is only part of the truth. Alcestis knew more. And in the sequel Admetus understands (712, 883, 900).

But the most dramatic and the most illuminating passage of the whole dialogue is Pheres' swift retort to his son's impatient cry 'Well then, I hope you may live longer than Zeus himself.' The answer is 'You curse your parents, though they have done you no wrong!' Pheres, by all the standards of normal Greek, is right when he calls it a curse.

Heracles is an ordinary human being, very generous, somewhat stupid, full of life. It is, indeed, only his vitality that is abnormal. We must not judge him solely by the evidence of the outraged servant. He sings when he is merry, and the servant, not unnaturally, finds his singing 'a discordant howl.' But that does not justify us in assuming that he is disgustingly drunk. He calls for his food with gusto, which, in the circumstances, seems to the servant outrageous. But the servant does not understand the circumstances (751, 807). When he has wine in him, he philosophises, as human beings will. But he does not talk nonsense. His philosophy is vital to his character and relevant to the main theme of the play. No man knows whether he will be alive to-morrow: every mortal owes one debt; we all shall die. Therefore, take pleasure as you find it, enjoy the gifts of Kypris; and, being mortal, fit your thoughts to your mortality. That is one inference from the fundamental fact that mortals have to die. The other he puts into practice when he goes out to fight Death. It cannot be too often repeated that Sarpedon's exhortation (*Il.* xii, 322) represents one aspect of the normal view, the nobler aspect, nobly stated, but still, for Greek heroic morals, normal:

νῦν δ', ἔμπετος γὰρ κῆρτος ἐφαστάσει θανάτοιο
μυρία, δὲ οὐκ ἔστι φεύγειν θροῶν . . . ἰδμεν.

That is the view on which Heracles, sober, acts. The dialogue with the chorus on his first arrival was the device by which Euripides ensured that this other aspect of Heracles should, from the outset, be before our minds. Heracles is already on his way to face death or victory. He will get nothing for himself if he wins (488-491). Simply, it is his destiny to face 'children of Ares,' and his answer to destiny is that no one shall ever see the son of Alcmene (the son of his mother, you notice) play the coward.

Consider what we have witnessed. We have seen Admetus, the sincere, mechanical devotee of an exemplary orthodoxy, elaborating, in quite genuine distress, the programme of a life of mourning, which he felt was only fair, as a return for his wife's great sacrifice. The programme was grandiose,

all-judging Jove.' And then consider Plato, *Symp.* 208 c-d: ὅτι καὶ ἴφης 'Αλκμήνῃ τοιαῦτα ἄνθρωποι ἀνέστησαν ὅτι, ὅτι 'Αχιλλεύς Παρρησίῃ ἡμετέραν . . . μὴ ἀνέμεναι ἀνέμεναι ποῦναι

ἡμεῖς καὶ ἡμεῖς ἐλάττω . . . τοιαῦτα ἄνθρωποι ἀνέστησαν καὶ τοιοῦτοι ὅσοι ἀνέστησαν ἡμεῖς ποῦναι, ὅσοι ἂν ἀνέμεναι ὅσοι, τοιοῦτοι ἄλλοι καὶ γὰρ ἀνέμεναι ἴφην.

impressive, artificial. It would have meant a life which Heracles would have described, and rightly, as 'not a life, but a misfortune' (802). Real life burst in with the irruption of Heracles. Admetus tried to combine loyalty to his programme with punctilious observance of the claims of hospitality. But his conception of those claims, like his loyalty, was formal, decent, correct. It did not reach the heart of friendship. Yet we could see that he had a heart.

There followed the scene with Phereas, with its exposure of the soul of Admetus. It was necessary that Admetus should react with violence. When he curses his father, his theory of life is crumbling about him. He is himself, at that moment, convulsed by egoism. But the convulsion is a sign that the devil is about to pass out of him.

After such a scene, it is not simply 'comic relief' that we need. It is a touch of simple humanity. That is what Heracles brings. The blundering generosity of Heracles softens and heals, for we, too, if we have imagination, have been painfully revealed to ourselves.

Meanwhile Admetus has been burying his wife. Heracles has not merely comforted us, but has prepared us to receive the hero on his return. Admetus, when he comes, is changed. He has forgotten his indignation. Notice how simply he refers to his mother (contrast 637, 805). He has learnt sympathy even for servants (see 638, 675, 771, 948). Above all, notice how he replies to the challenge of the chorus, the last and clearest statement of the old assumption about life and marriage. 'You have had your trouble, as all men have, but you have also had great good. You have lost your wife. But you have your life. What is there new in all this?'

He answers that he counts his wife more fortunate than himself. He has learnt much, but the play is not yet over. His pride is gone. He can no longer comfort himself and arm himself against humanity, by thoughts of his piety, his prosperity, his reputation, and the wickedness of other people (958-961. The last line is vitally connected with line 905). He has recognised, in the spirit, not merely intellectually, his mortality. But for him and for the audience the pious moralising of the chorus, about Necessity and the proper inferences, have become inadequate. Thus far Euripides has brought us.

The last stage is still to come. Heracles, with his blundering human nature, unconsciously works the miracle. At line 1067 Admetus, for the first time, really breaks down. He has fallen in love,⁸ not with the strange woman whom, in spite of all the codes of friendship, he cannot bear to take into his house, but with the wife of whom her physical presence reminds him. It was necessary that this should happen. He had to fall in love with Alcestis before he could receive her again and enter on 'a better life.' I will leave the reader to discover for himself the many subtle touches in this scene, which invests with fresh significance and new emotion old themes of the play.

⁸ The stages are marked by the words *ἀνείχετο* (940) and *ἀπείχετο* (1079). In 1067 ff. the symptoms of his emotion are

traditional symptoms of lyrical passion, immortalised by Sappho.

I hope I have said enough to convince him that the parting words of Heracles are neither ironical nor inadequate. Heracles is still Heracles, no more no less. 'Go on,' he says, 'in your life of piety to friends and justice. I give you joy. And I, for my part, must shoulder my burden, and go on to my next labour.' He does not stay to hear, and he would not understand, if he heard, the final utterance of the hero:

*εὖν γὰρ μεθαρμόσμεθα βελτίον βίον
τοῦ πρόσθεν· αὐτὸ γὰρ εὐτυχῶν ἀρνήσομαι.*

But, although Heracles would not understand the full meaning of these words, he would not, being a Greek, who talked Greek, have thought, with Verrall, that the last clause was a grudging admission from a man who was still an egoist.

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CORNELIUS NEPOS ON MARATHON AND PAROS.

It might seem waste of labour to examine minutely an account of the battle of Marathon and the Parian expedition so late as that contained in the brief life of Miltiades ascribed to Cornelius Nepos, more especially as I must confess that the results of my enquiry are in the main negative, and that such positive conclusions as I reach have not the charm of novelty, but serve merely to strengthen theories already well known, and in England at least widely accepted. But this late epitome is almost the only consecutive narrative of these events outside the pages of Herodotus. Marathon was sung by poets, and bespattered with rhetoric by patriotic orators, but such historical accounts as there once were of the battle have perished, save for the still later epitome of Tragus Pompeius made by Justin. Again there is good reason to think that Cornelius Nepos is here following the fourth-century historian Ephorus. This is manifestly the case in his account of the Parian expedition, the kernel of which is little more than a translation of the fragment of Ephorus preserved in Stephanus of Byzantium *s.v.* Paros.¹ That Nepos drew his story of Marathon from the same source is the general, and as I shall hope to show, the right opinion, though it has been denied by Dr. E. Meyer.² Further, the view of the campaign and the conception of the battle to be found in Nepos have been accepted as historical by many of the highest authorities in Germany, *e.g.* by Des. H. Delbrück,³ G. Busolt,⁴ and in the main by Dr. E. Meyer.⁵ And at last there has been an effort to deal with a difficulty treated with lordly disregard by the German writers, *viz.* the lack of evidence to support their theories; for in a recent article Mr. Casson⁶ has tried to show that Ephorus has not only given us a more reasonable account of the battle than Herodotus, but has also preserved for us a tradition ignored by the earlier historian. If, therefore, we are to maintain the superiority of the Herodotean story with all its imperfections, and of the reconstruction of the campaign first put forward by Mr. Munro⁷ and supported by Dr. Grundy,⁸ we must show the hollowness of the plausible but shallow theories of Ephorus.

¹ Ephorus, *fr.* 107 (Müller, *F.H.G.* i. 263).

² *Geschichte des Alterthums*, iii. § 194, n. p. 332.

³ *Die Perserkriege und die Burgunderkriege*, pp. 52-53; *Geschichte der Kriegskunst*, i. 30-31.

⁴ *Griechische Geschichte*, iv. 581-86.

⁵ *Geschichte des Alterthums*, iii. §§ 192-5, pp. 326-336.

⁶ *Klio*, xiv. (1914), 69-90.

⁷ *J.H.S.* xix. 185-97.

⁸ *Great Persian War*, 160-199.

First, however, I would argue (in opposition to an obiter dictum of Dr. E. Meyer)⁹ that Nepos copied Ephorus in his account of Marathon as well as in that of the Parian expedition. Dr Meyer would seem to be biased by two pre-suppositions, neither of which is tenable. The first is his general thesis¹⁰ that the biographers, Plutarch and Nepos, drew almost exclusively from a biographical Hellenistic tradition, while the historical compilers followed historians (e.g. Diodorus, Ephorus). This may well be true in the main of Plutarch, though he is no servile copyist and quite capable of making use of his wide historical reading as well as of culling characteristic stories from memoirs and speeches. But with regard to the earlier biographies of Nepos, those of Miltiades, Aristides, Pausanias, and Themistocles, I should venture to dispute Dr Meyer's contention, which indeed he is himself constrained to modify by the admission¹¹ that Nepos in his *Pausanias* and in part of his *Themistocles* was following Thucydides. I should go further and maintain that in none of these four lives is there a fact mentioned which may not have been found in the best known historians, Herodotus, Thucydides, Ephorus, and Theopompus. The only trace of a biographer's bias is the manifest wish of Nepos to make the best of his hero. And this may very well be his own doing, not an inheritance from a biographical tradition.

Dr Meyer's second ground would seem to be a belief that Justin and not Nepos gives us in epitome Ephorus' account of Marathon. Now there is some reason to think that Trogus Pompeius, whom Justin epitomised, drew part of his history from Ephorus. The fact that Trogus closed his eighth book with the siege of Perinthus by Philip¹² (just where the work of Ephorus, or rather its continuation by his son Demophilus,¹³ ended), goes to show that Trogus was in that part of his history following Ephorus. But this is no proof that he did so for the Persian war. On the contrary, it is certain that in the period from the Persian to the end of the Peloponnesian war (480-404 B.C.), Diodorus slavishly copied Ephorus,¹⁴ except in the Sicilian sections, which probably came from Timaeus. Now there are no doubt striking points of resemblance in the accounts given by Diodorus and Justin of Xerxes' invasion, particularly the numbers given for the Persian army,¹⁵ the description of the night attack made by Leonidas on the Persian camp¹⁶ at Thermopylae, and the importance ascribed either to the promise of or to the actual withdrawal of the Ionians from the Persian fleet at Salamis.¹⁷ But if there are these likenesses there are differences no less remarkable. Justin (xix. 1. 12) distinctly denies one of the most important novelties

⁹ *Geschichte des Alterthums*, iii. § 194, p. 352.

¹⁰ *Forschungen zur alten Geschichte*, ii. 65 f.

¹¹ *Ibid.* ii. 68.

¹² Cf. A. von Gutschmidt, *Kleine Schriften*, i. 18.

¹³ Cf. E. M. Walker, *Hellenica Oxyrhynchensis*, 87-97.

¹⁴ Striking confirmation of this view is to be found in the new fragments of Ephorus.

Cf. Grenfell, *Ox. Pap.* Pt. xiii. No. 1610, pp. 98-127.

¹⁵ Diodorus, xi. 3, 7 and 5, 2 = Justin, ii. 10, 19.

¹⁶ *Ibid.* xi. 9 and 10 = Justin, ii. 11.

¹⁷ *Ibid.* xi. 17, 3, 4. Cf. Justin, ii. 12, 25, 26.

in Ephorus,¹⁷ the alliance between the Great King and Carthage, while he ascribes the *aristeia* for the whole war to Athens and its general Themistocles, whereas Diodorus only allows them the prize for valour in the minor engagement at Artemisium, reserving the greater glories of Salamis for the Aeginetans, and of Plataea for the Spartans and Pausanias.¹⁸ Nor is it fanciful in my opinion to see a return to Herodotus in Justin's emphatic reassertion of the appeal of Themistocles to the Ionians¹⁹ and of the horrors of Xerxes' retreat²⁰ (passed over by Diodorus) bedizened though both these episodes are with the meretricious rhetoric of a later age. It is at least clear that Trogus did not follow Ephorus exclusively or slavishly in his account of the greater Persian war, and so the assumption that he did so in the story of Marathon remains unproved and improbable.

But if we turn to Cornelius Nepos how high is the probability that Ephorus is his original source. The succeeding chapter on Paros is as we have seen translated from Ephorus—and there is great similarity between the two stories. In both narratives, which as given in Herodotus contain obvious gaps and defects, are rendered rational or at least plausible. The religious motive, so prominent in Herodotus,²¹ disappears and there are substituted at Marathon as at Paros political and military reasons, which make the actions of the Athenians and of their opponents reasonable and intelligible. In this and other similar points Justin is far less plausible and therefore far less likely to represent Ephorus. For instance while both authors insist on the eagerness of the Athenians to fight, and on the speed with which the battle followed the march to Marathon, Nepos at least makes the Persian leader Datis force on the battle in order to anticipate the advent of the Spartans, while Justin represents Miltiades as too impatient to wait for his own allies.²² Similarly the numbers of the Persian forces, incredible enough even in Nepos, are far more grossly exaggerated in Justin. While the former is content with a total of 200,000 foot and 10,000 horse, reduced in the actual battle to 100,000 foot and 10,000 horse, Justin talks of 600,000 Persians, and asserts that of these 200,000 perished by sword or shipwreck.²³ Finally there is in Justin a distinct effort to retain some features of Herodotus' story which have altogether disappeared in the more critical account in Nepos. In particular I may mention the exploit of Cynegirus, spoiled though it be by tasteless rhetoric in Justin,²⁴ and the famous charge of the Athenians who are said to have traversed the mile between the two armies *ante iactum sagittarum*.²⁵

But enough of Justin: I pass to a detailed examination of the principal

¹⁷ Ephorus, fr. 111, ap. Schol. Pind. *Pyth.* 140; Müller. *P.H.G.* i. 264. Cf. Diodorus, xi. 1, 4.

¹⁸ Justin, ii. 14, 10, 11, as against Diodorus, xi. 13, 2; 27, 2; 33, 1.

¹⁹ *Ibid.* ii. 12, 1-7 = Hdt. viii. 10, 1, 22.

²⁰ *Ibid.* ii. 13, 8-12 = Hdt. viii. 115-20.

²¹ Cf. for Paros vi. 134, and for Marathon

the visions of Philippides, xi. 105, and of Epicharmus, vii. 117.

²² *Nep. Milt.* 5, 1 and 4, as against Justin, ii. 9, 9-11.

²³ *Ibid.* 4, 1 and 5, 4, as against Justin, ii. 9, 8 and 20.

²⁴ Justin, ii. 9, 16-19 = Hdt. vi. 114.

²⁵ *Ibid.* ii. 9, 11. Cf. Hdt. vi. 112.

elements in Cornelius Nepos. Before attempting to weigh their worth it may be well to give a brief summary of them (cf. Macan, *Herodotus IV-VI*, ii. 206).

(1) The force sent by Darius was 500 ships, 200,000 foot and 10,000 horse under Datis and Artaphernes (*Milt.* 4, 1).

(2) The *causa belli* alleged was the help given by Athens to the Ionians in the capture of Sardis.

(3) The royal *praefecti* touched at Euboea, quickly reduced Eretria, and sent its inhabitants as captives to the king (*Milt.* 4, 2).

(4) From Euboea the Persians crossed to Marathon, a plain ten miles from Athens.

(5) The Athenians sought help from Sparta only and sent Phidippus, a runner, to beg for aid with all speed (*Milt.* 4, 3).

(6) At home ten praetors are created to command the army. They dispute among themselves whether to stand a siege, or to march out to battle (*Milt.* 4, 4).

(7) Miltiades urges strongly the latter course (the pitching of a camp), as likely to encourage the citizens and to discourage the enemy (*Milt.* 4, 5).

(8) The arrival of a thousand Plataeans at Athens turned the scale in favour of Miltiades. *N.B.*—The 1,000 Plataeans made the total Greek force 10,000 (*Milt.* 5, 1).

(9) The Athenians, moved by Miltiades' weight (*auctoritas*), march out and encamp in a suitable spot (*Milt.* 5, 2).

(10) Next day, at the foot of the hills, in a position strong by nature, i.e. protected by mountains, and improved by placing trunks of trees to impede the operation of the enemy's cavalry, they join battle (*Milt.* 5, 3).

(11) Datis perceived the disadvantages of the position, but trusted to superior numbers and was anxious to engage before the arrival of the Spartans (*Milt.* 5, 4).

(12) He drew up in line of battle 100,000 foot and 10,000 horse.

(13) But the Athenians so completely routed a foe of ten times their own strength that the Persians fled not to their camp but to their ships (*Milt.* 5, 5).

* Now in this account there are a certain number of obvious anachronisms which may with great probability be assigned to Cornelius Nepos himself. The 'creation' of ten praetors (6) (apparently at the last moment), the insistence on the pitching of a camp (7, 9) and the *auctoritas* of Miltiades, (10) like the more harmless royal praefects (3) and Persian camp (13), have a right Roman ring which betrays their origin. From the same source came in all probability the impossible name Phidippus (5) and the palpable error in the estimate of the distance between Marathon and Athens (4) (10 miles instead of 22). But apart from these blemishes the story has a coherence and plausibility which has led many modern writers to infer its truth. In particular they are inclined to adopt Nepos' view as to the command at Marathon, and to accept his statements that the debate among the generals

took place at Athens and dealt with the question whether the Athenians should take the field or not (6), and that the decision to do so was due to the insistence of Miltiades and the arrival at Athens of the Plataean contingent (8). At first sight it would certainly appear that in all these points, Nepos, who is clear, coherent, and consistent, is superior to the hesitating and confused account of Herodotus. Yet a closer examination shows that there is more truth in the doubts and inconsistencies of the historian than in the neat solutions of Cornelius Nepos.

Taking first the question of the command, explicitly Herodotus declares (vi. 110) that the command (*πρωταρχία*) circulated amongst the ten generals, each being entitled to claim it for one day, so that Miltiades only holds it (till his own day comes round) by grace of his colleagues. But there is a latent tendency to regard him throughout as commander-in-chief, as is shown by the ascription of all the Athenian movements to him, and by the phrase τῶν ὁ δέκατος ἦν Μιλτιάδης (vi. 103) which would to contemporaries suggest that he was *primus inter pares*.²⁶ This view is developed by Nepos (*Milt.* 4, 5; 5, 2), though he too implies that Miltiades has to persuade his colleagues [*Unus Miltiades maxime utebatur. . . Quo factum est ut plus quam collegae Miltiades valeret. Eius ergo auctoritate impulsus. . .*]. In Justin (ii. 9, 10) the other generals vanish, Miltiades rules alone [*Miltiades et dux belli et auctor non expectandi consilii*]. But in both these late versions, and therefore presumably in Ephorus, the polemarch has absolutely disappeared. Yet the explicit testimony of Aristotle (*Ath. Pol.* 22, 2, cf. 3, 2) that the polemarch still led the whole army, the ten generals doubtless commanding the tribal regiments, should surely be accepted. Dr. Meyer, who rejects it,²⁷ takes no exception to Aristotle's statement (*Ath. Pol.* 22, 5) that the lot was not reintroduced for the archonship till 487 B.C. And that statement removes the only real obstacle to the retention of the command by the polemarch in 490 B.C. It would indeed be incredible that an official appointed by the hazard of the lot should lead the army, but if the polemarch, as well as the strategi, was an elected officer, what reason is there for refusing him the position of general? All the incidental points in Herodotus and Plutarch, especially his leadership of the right wing,²⁸ the natural post for a Greek general,²⁹ his vote in the council of the strategi, the language of Miltiades' appeal to him, and as it would seem his possession of a casting vote,³⁰ strongly support the view that, while in the direction of the war the polemarch must consult the council of strategi, he yet remained at Marathon president of the council and commander-in-chief of the army. If this be so, Nepos and Justin have cleared away the confusion of Herodotus' narrative by the omission of its more historical elements, and have left us only the erroneous popular opinion which insisted on making Miltiades not

²⁶ Cf. *Monstrum* (Thuc. i. 116, ii. 13, etc.).

²⁷ *Eur. Supp.* 857; *Xen. Hest.* ii. 4, 30.

²⁸ *Geschichte des Alterthums*, iii. § 201, n., p. 344.

²⁹ *Hdt.* vi. 109, 110. Miltiades' language resembles that of Themistocles to Eurybiades, *Hdt.* viii. 60.

³⁰ *Hdt.* vi. 111; *Plat. Quaes. Cosm.* i. 10, 3; *Mor.* 628 E.

only the inspiring genius of the Athenian army but also its nominal commander.

Again the removal of the debate among the generals from the field of Marathon to the city of Athens²¹ seems at first sight rational and probable. No doubt a debate at Marathon, whether the Athenians should fight in the field or not, would be an absurdity, but there is every reason to suppose that the determination of this momentous question did not lie with the generals and therefore cannot have been decided by them either at Athens or at Marathon. We have the distinct testimony of Aristotle (*Rhet.* iii. 10, 1411a 10) supported by that of Demosthenes (*de Fals. Leg.* § 303 with the scholiast) that it was determined by a decree of the people moved by Miltiades. And even if the direct evidence were less clear, precedent and analogy would lead us to suppose that the question of taking the field or staying within the walls would be decided by vote of the whole body of citizens. Miltiades in persuading them was the true author of the strategy, as later of the tactics, which won the triumph of Marathon. But no room is left for the plausible story in Nepos of a decision taken at Athens by the board of strategi. On the other hand the debate at Marathon rightly interpreted is neither unlikely nor undesirable (as Mr. Casson calls it, p. 72). It is quite clear from both the more sober accounts of the campaign²² that at first the Athenians at Marathon remained strictly on the defensive. The change to the offensive, caused probably by the division of the Persian force, would naturally be debated in the Athenian council of war, and such a debate would obviously take place in the field, when the position and movements of the enemy were known. If the decision to take the field did not lie with the generals, their vote cannot have been determined by the arrival of the Plataeans. And this is of the essence of the story told by Cornelius Nepos (*Milt.* 5: 1, 2). It is therefore irrelevant to argue, as does Mr. Casson (p. 73), that it would be much easier for the Plataeans to march to Athens than to Marathon, or even that if they were going to Marathon they would naturally pass through Athens. The question between Herodotus and Nepos is far more fundamental, viz. had the arrival of the Plataeans anything to do with the decision of the strategi (or of the Assembly) to take the field? In opposition to Nepos it may fairly be maintained that unless the Athenians had already taken the field the Plataeans would never have come to their aid. No Greek state felt in duty bound to send its forces to stand a siege in the town of an ally but only to join an army in the field. This is the most probable explanation of the mission of Philippides²³. He was to tell the Spartans that the Athenians were about to take the field against the invading Persians, and to bid them send with speed the succour due in that case, and in that case only, to their allies. Conversely when the Eretrians refuse to fight in the field and take refuge behind their walls, the Athenian cleruchs

²¹ Coen. Nep.: *Milt.* 4, 4-5, 2, as against orators and Justin.
Hdt. vi. 103, 109.

²² Cf. Herodotus and Nepos as against the

²³ Hdt. vi. 105; *Milt.* 4, 2.

from Chalcids leave them to their fate.²⁴ The arrival then of the Plataeans whether at Athens or at Marathon must have been the effect and not the cause of the resolution of the Athenians to take the field. And in that case it is far more likely that they only joined the Athenians in their camp on the hills above Marathon, as Herodotus implies.

There remain two items in Nepos which have been thought to show that Ephorus possessed information withheld from us by Herodotus, viz. the total forces engaged on either side, and the immediate preliminaries of the actual battle. As to the numbers of the opposing armies it is of course the fact that Herodotus is silent, though he gives precise figures for the slain.²⁵ But the silence of Herodotus as well as the moderation of the numbers he gives of the fallen, is all to his credit, since it shows that he prefers not to give figures which he believed to be untrustworthy and only to record those which were supported by good evidence. And the figures given in Nepos rest in all probability merely on the conjectures of Ephorus. His figure of 10,000 for the Greeks would appear to have been differently understood. Justin (ii. 9, 8) makes the Athenians 10,000 exclusive of the 1,000 Plataeans, Nepos (*Milt.* 5, 1) reckons the whole force at 10,000 and consequently the Athenians at 9,000. In this he has the support of Pausanias (x. 20, 2) and of Plutarch (*Mor.* 305 B). But it is obvious that both sets of figures rest on a rough estimate of 1,000 hoplites to each Attic tribe. Such a number is likely enough and is supported by the numbers given in 479 B.C.²⁶ but this probability is no proof that Ephorus drew it from an earlier author. And the other numbers in Nepos range from the improbable to the impossible. It is highly improbable that the Plataeans should in 490 have been able to send a thousand men to Marathon, since in 479 B.C. they could only muster six hundred to fight in their own land, doubtless the utmost effort of which the little city was capable.²⁷ Again the 210,000 warriors attributed to the Medes (*Milt.* 4, 1) are no doubt an improvement on the 500,000 of Lysias (*Epitaph.* 21) and Plato (*Menex.* 240 A) or the 600,000 of Justin (ii. 9, 9). But 210,000, or even the 110,000 said to have taken part in the battle (*Milt.* 5, 4), is a number ridiculously beyond the power of an ancient fleet to carry. Even if the Persian fleet really numbered 500 galleys (*Nep. Milt.* 4, 1) or 600 galleys beside horse transports (*Hdt.* vi. 95) it could only have carried some 100,000 or 120,000 men, including the crews amounting probably to 50,000. Thus the 200,000 of the whole force, or the 110,000 combatants are alike incredible, though less absurd than the rhetorical exaggerations of the orators and Justin. We need not then consider the numbers in Nepos to be anything more than the more or less probable conjectures of Ephorus. And that such is their origin is suggested by the fact that the estimate is probable enough in the case of Athens where Ephorus had adequate knowledge, improbable

²⁴ *Hdt.* vi. 100.

²⁵ *Ibid.* vi. 117.

²⁶ Eight thousand at Plataea (*Hdt.* ix. 28 *et seq.*) and an uncertain number at Mycale

(*Hdt.* ix. 102 *et seq.*)

²⁷ *Hdt.* ix. 28. Beloch, without sufficient ground, casts doubts even on this smaller number (*Bevölkerung*, p. 165).

for Plataea where he would have less information, and frankly impossible in the case of the Persians where he would be ignorant.

In the actual description of Marathon the best points in Cornelius Nepos (*Milt.* 5, 3, 4) are the recognition of the mountains as a feature of the defence, the means taken to strengthen the position artificially, and the account of the immediate preliminaries of the battle. It is the coherence and probability of his view that Miltiades only accepted battle in a defensive position on the hills, strengthened against cavalry by the use of trees, while Datis took the offensive in spite of these disadvantages to forestall the arrival of the Spartans, which has caused so many modern historians to prefer his account. Yet even here there is something to be said on the other side. The vagueness of the location of the camp, 'loco idoneo,' contrasts unfavourably with the specific 'Temenos of Heracles' in Herodotus (vi. 116). And Nepos leaves us to guess how the trees were used to protect the Greek flanks against the dreaded cavalry. Again, the presence of the Persian horse is a doubtful gain. Not only is there the silence of Herodotus against it and the clear, if late, tradition preserved in Suidas *χαλεπὴ ἰσχυρῆς*, but if it really was present, how can it have failed to leave any mark on the traditions of the battle? Must it not, as at Plataea, have done something to cover the retreat of the routed infantry? Above all, how can it possibly have been re-embarked in face of the Athenian pursuit? No satisfactory explanation of these outstanding difficulties has ever been given.

Again, while I gladly acknowledge the reasonableness of the motive which leads Datis in spite of the strength of the hostile position to press his attack on it, viz. his desire to anticipate the coming of the Spartans, yet in his action as reported there is a curious inconsequence. Though his total force has been given us, 200,000 foot and 10,000 horse (*Milt.* 4, 1) and he relied, we are told, on numbers, yet he only used in the battle 100,000 foot and 10,000 horse (*Milt.* 5, 4). The discrepancy can hardly be a mere oversight of Nepos, as in his brief narrative the figures are necessarily so close together that the contradiction would strike the most careless of writers. I would rather (with Mr. Munro) see in it a faint trace of a tradition that the Persians fought with but half their force at Marathon, because a part had already taken ship again for Phalerum.

Further there is a patent defect in the narrative of Cornelius Nepos. There is not a word about any movement in the battle except the flight of the Persians to their ships. We might perhaps ascribe this to the brevity of the Roman compiler, were it not that Polybius singles out for censure in Ephorus his ludicrous inability to understand and explain in detail the movements and operations of troops on the actual field of battle.³⁸ The stage battles of Diodorus³⁹ abundantly justify the severe judgment of a critic not in general unfavourable to Ephorus.⁴⁰ And the modern followers

³⁸ Polyb. xii. 23 f. Cf. Maan, *HG* IV-VI, vol. II, p. 211.

³⁹ For Thermopylae, cf. *supra* and Rosell, *ibid.* 623, n. 5. For Plataea, Leutra, and

Marathon, Holm, *History of Greece* (E.T.), iii, pp. 18, 104, 129.

⁴⁰ Polyb. xii. 28.

of Ephorus⁴¹ are driven after all to pilfer from Herodotus the famous charge of the Athenians, converting it (against all the ancient evidence) into a pursuit of the beaten Persians whom the Athenians had already repulsed from their position on the hills. The great mound (Soros) which marks the tomb⁴² of the Athenians still stands to bear silent witness against them. Such a tomb would surely be placed where the dead lay thickest and the fray had been most severe. Now if the Athenians charged down from the hills before the battle, the struggle would naturally be just where the Soros stands, but if the Persians first attacked them among the hills, the centre of the fight would be a mile away.

Lastly, the evidence for the view of the battle to be found in Nepos is of the weakest. There is not a trace of it in any other account, not even in Justin. It traverses directly some of the clearest points in Herodotus, viz. the long delay at Marathon, and the final assumption of the offensive by Miltiades. It must be regarded as a critical reconstruction, unless it can be shown to rest on some earlier authority than Ephorus. Hence Mr. Casson (p. 83) attempts to gain support for Ephorus by discrediting Herodotus. He asserts that 'Herodotus used Alcmaeonid sources for the greater part of the incidents he describes and particularly for the battle of Marathon. Whatever the other sources were that he used it is fairly certain that they were neither those of the house of the Peisistratidae nor those of the Philadae.' He then argues at length that the divergent tradition in Ephorus and Nepos came from Philaid sources transmitted through the *Ἡεροικὰ* of Dionysius of Miletus. Now there is not, and cannot be, the smallest proof either that Ephorus used Dionysius or that Dionysius followed Philaid tradition. The only fragment of Dionysius extant refers to Persian history, and not even the titles or scope of his works are certain. The statements made about him rest wholly on learned conjectures made in recent times.⁴³ I think, then, we may be spared unprofitable speculation on a nebulous subject if it can be shown distinctly that Herodotus, in the life of Miltiades in general, and at Marathon in particular, clearly made use of a source favourable to Miltiades as well as of the hostile Alcmaeonid tradition. And I am confident that this can be done. Had Mr. Casson limited his statement to the Parian expedition it might have passed muster; it is little short of absurd when extended to the earlier life of Miltiades. Has Mr. Casson forgotten the patriotic advice said to have been given by Miltiades to the Greek tyrants at the bridge over the Danube,⁴⁴ and the earlier history of the Philaid house given in connexion with the colonisation of the Chersonese,⁴⁵ and again in close connexion with the story of Marathon itself?⁴⁶ Here, in particular, details are mentioned (e.g. about the family tomb) which can have had no great interest, except to the Philaid house. Again, the one strong argument

⁴¹ e.g. Delbrück, *Gesch. der Kriegskunst*, p. 60.

⁴² Cf. Paus. i. 32, 3; Thuc. ii. 34.

⁴³ Cf. Bury, *The Ancient Greek Historians*, pp. 22-4, and *AJPhil*, ii. 334, iii. 330 (Lehmann-

Haupt), iv. 303 (Präsekt), etc.

⁴⁴ *Ibid.*, iv. 137.

⁴⁵ *Ibid.*, vi. 34-41.

⁴⁶ *Ibid.*, vi. 103.

against the use by Herodotus of a Philaid source, viz. his lack of information about Miltiades between the Scythian expedition and the Ionic revolt,⁴⁷ applies with equal force to Cornelius Nepos, and against Nepos (*Milt.* 1), we may add the charge that he has confused Miltiades, first tyrant of the Chersonese, with his greater relative and namesake the victor of Marathon. How, then, can we believe that Nepos (through Ephorus) preserves for us Philaid traditions neglected by Herodotus?

Coming to Marathon itself, doubtless Mr. Casson (p. 83) is right in holding the defence of the Alameonidae⁴⁸ to have been inspired by the house itself. But the way in which it is introduced should have warned him that Herodotus is here turning from one authority to another, as may be seen by comparing the bald statement of the charge with the highly artificial defence.⁴⁹ And in his account of the campaign Herodotus, in some points, emphasizes, and probably exaggerates, the part played by Miltiades, in ascribing to him the actual leadership and the winning over of Callimachus.⁵⁰ Mr. Casson (p. 75) is offended because to Herodotus the battle 'was a wild forlorn hope of men inspired with almost supernatural courage, whereas Nepos implies 'that it was skilfully conducted and a triumph of tactics.' The contrast is exaggerated, but, even were it true, it proves nothing for his purpose. For as he elsewhere (p. 89) admits, 'all the battles of the Persian Wars are, if we believe Herodotus, brilliant examples of heroism and poor ones of strategy.' Unless, then, it can be shown that in every instance Herodotus happened to use sources adverse to the general in command, we must look for the explanation elsewhere than in the use of a hostile tradition. It may be found in two conclusions drawn by Dr. Grundy⁵¹ from his study of the whole war. In his final summing up he contrasts with Herodotus' extraordinary accuracy in statements of facts ' (1) his lack of information as to the motives of those in command, and (2) his lack of experience such as might have enabled him to form deductions as to those motives.' In fine, Herodotus produces the impression that there was a want of generalship, because he describes all battles, not Marathon only, from the point of view of the soldier in the ranks, not that of the officer in command. This and not an anti-Philaid bias is the reason that he fails to do full justice to Miltiades.

And apart from this failure in military knowledge and insight, there is reason to believe that Herodotus keeps closer to the Philaid tradition of Marathon than Ephorus. Where should that tradition be found if not in the picture of Marathon in the Stoa Poikile, called after Peisianax, a relation of Cimon (Plut. *Cim.* 4) and doubtless built to add lustre to the Philaid house? In that picture there were to be seen fighting for Athens, Miltiades, encouraging his men (Aesch. *v. Ctes.* § 186), the polemarch Callimachus (Paus. i. 15, 3), Cynegirus (Plin. *N.H.* xxxv. 57) and Epizelus (Ael. *N.H.* vii. 38). They all are duly found in the pages of Herodotus (vi. 114, 117),

⁴⁷ Cf. Casson in *Klio*, xiv. 87; Grundy, *Great Persian War*, 146, n.

⁴⁸ *Ibid.*, vi. 121-4.

⁴⁹ *Ibid.*, vi. 115 and 121-4.

⁵⁰ *Ibid.*, vi. 109, 110.

⁵¹ *Great Persian War*, p. 379.

but only Miltiades is mentioned by Nepos (*Milt.* 6, 3). The Philadae may well have preferred to record the heroic courage inspired by Miltiades' leading, rather than the careful tactics which baffled the enemy. No picture can give the movements of troops, but I cannot doubt that the three scenes set before us by Pausanias (i. 15, 3) are in accord rather with the fierce charge regarded by Herodotus as the essence of the battle than with the cautious defence described by Nepos.

NOTE—I can see no reason to doubt the traditional date and origin of the Stoa Poikile and of the picture of Marathon. I should myself accept the theory of C. Robert (*Herm.* 1890, and *Winckelmannsprogramm*, 1895) and Poinsoy (*Stud.* iii. 133) that the battle of Oenoe depicted in the Stoa had nothing to do with the capture of that town by Iphicrates *circa* 392 B.C. but is to be placed in the time of the Argive-Attic war against Sparta 460-55 B.C. To me the arguments for connecting the Argive memorial of Oenoe at Delphi (Paus. x. 10, 3) with that war seem convincing, but such questions of epigraphy and sculpture must be left to experts. Even if their verdict be adverse, and I am constrained to date the fight at Oenoe about 392 B.C. and to identify the sculptor of the memorial at Delphi with the Hypatodorus dated by Pliny (*N.H.* xxxiv. 50) about 370, I should still maintain that only the picture of Oenoe should be brought down to the fourth century, while the Stoa itself and the more famous pictures in it belong to the middle of the fifth century.

The fight with the Amazons is definitely ascribed to Micon and approximately dated by its mention in Aristophanes (*Lysist.* 678 with the scholia), the other pictures are by the general consensus of our authorities ascribed to Polygnotus and his school.

The doubt whether Panaenus (Plin. *N.H.* xxxiv. 57, Paus. v. 11, 6) or Micon (Arrian, *Alex.* vii. 13, 5; Aelian, *N.H.* vii. 38) was the painter of the battle of Marathon is for our purpose negligible. All I contend is that the Stoa itself, and the picture of Marathon it contained should be regarded as a memorial erected by a connexion of Miltiades, intended to glorify the Philaid house in the person of its greatest member.

I turn to the expedition against Paros. Here the case for Ephorus and against Herodotus is undoubtedly stronger, so that many critics prefer the later historian.⁵² Herodotus, though his account has one of the marks of genuine tradition, the definite length of time (twenty-six days)⁵³ assigned to the expedition, discredits himself by two characteristic failings: (1) his ascription of a great event to a petty personal motive, the rancour of Miltiades⁵⁴; (2) his preference for a version of the tale (the Parian) attributing the result to divine interference.⁵⁵ Further he may fairly be suspected of

⁵² E.g. Dr. Macan, *Hdt.* IV-VI, vol. II. App. xi.

⁵³ *Hdt.* vi. 133.

⁵⁴ *Ibid.* vi. 133.

⁵⁵ *Ibid.* vi. 124, 125.

giving as the universally accepted Pan-Hellenic account what was in fact the version prevalent at Athens, hostile to Miltiades and possibly spread abroad by his Alcmaeonid opponents. On the other hand, there is here no doubt that Nepos is following Ephorus closely (cf. *sup.* p. 48) so that his account gains whatever weight we attach to the authority of that historian. It is also clearly free from the prejudices which bias Herodotus, whether religious or political.

In fine, Ephorus gives us what is on the face of it the more probable story of the Parian expedition. For the filibustering attack on Paros, inspired by the private spite of Miltiades, there is substituted a general commission to punish islands that had medized, followed by the forcible conquest of several and by the submission of others.⁵⁴ A public policy of establishing Athenian power in the Cyclades replaces the petty personal motive alleged in Herodotus. Yet this general commission against the medizing islanders and its partial execution may very possibly be no more than an inference from the pretext given in Herodotus (vi. 133). Again the concealment of the object of the expedition ascribed to Miltiades by Herodotus (vi. 132), which has offended the critics, would after all be the only way of preventing its betrayal to the Parians,⁵⁵ and might be absolutely essential to the success of the enterprise.

On the other hand, a general project of empire over the Cyclades seems over bold at a time when Athens was quite unequal to the task of protecting her own shores against the Persian, and cannot yet meet Aegina on equal terms in the Saronic gulf.⁵⁶ The precedent of Pisistratus has been thought to justify it. But it would appear that while that great tyrant adopted the most vigorous measures for securing the Hellespont⁵⁷ and the essential corn-route to the Euxine, in the Aegean he was content with a policy of peaceful penetration through the cultivation of Ionic sentiment⁵⁸ and an alliance with Lygdamis of Naxos.⁵⁹

And it is strange to find Mr. Casson (p. 71) supporting his view that the control of the Cyclades was the aim of the Parian expedition by appealing to an earlier statement in Nepos (*Milt.* 2, 5) that Miltiades, at the time of his occupation of Lemnos, 'pari felicitate ceteras insulas, quae Cyclades nuntiantur, sub Atheniensium redegit potestatem.' What trace is there elsewhere of this alleged Cycladic dominion before Marathon? Surely when Datis sailed across the Aegean to attack Athens, some mention of the fact that the islands on which he landed were already Athenian must have survived. Again, Lemnos and Imbros have everything to do with the true goal of Miltiades, the Chersonese, as has been forcibly brought home to us by our own operations in Gallipoli; they are utterly separate from the Cyclades, which can of course be far more easily reached from Attica itself. The identification of the islands, other than Lemnos, conquered by Miltiades

⁵⁴ *Corn. Nep. Milt.* 7, 1.

⁵⁵ Cf. the case of Naxos, *Ibid.* v. 23 f.

⁵⁶ *Ibid.* vi. 80, 92.

⁵⁷ *Ibid.* v. 24 f.; vi. 36 f.

⁵⁸ *Ibid.* 1, 64.

⁵⁹ *Ibid.* 1, 61.

before 490 B.C., with the Cyclades would seem to be a gross geographical blunder. If it was made by Ephorus, as well as by Nepos, it so far discredits his account of Miltiades' later successes in that region. Lastly, there is nothing to show that any of these islands were dependent on Athens 490-80 B.C. No doubt it is possible that some submitted for the moment and at once rebelled again after the failure of Miltiades at Paros. Nevertheless it remains true that these allegations of a wide policy of conquest and of partial success in carrying it out are discredited by the absence of any subsequent trace of their reality. In fine, if we may fairly charge Herodotus with degrading a serious attack on Paros into a private vendetta, we must recognise also that Ephorus has been led to exaggerate its scope and importance. His conception of an Athenian empire over the Aegean islands, using the Cyclades as a bulwark against the assault of a Persian armada, is redolent of the period when the grand fleet created by Themistocles controlled the seas. Not even in 480 B.C., after its creation, did the Greeks venture out into the Aegean to meet Xerxes, since to face in open waters a fleet superior both in number and in quality⁶² would have been to court defeat.⁶³ How much less can the Athenian navy of fifty or seventy ships⁶⁴ have dreamed of going out to meet the thousand galleys of the Great King?

Of the two accounts given of the failure to take Paros neither is really satisfactory. The Parian story of Herodotus (vi. 134 f.) is permeated with his theological conceptions of *ἔβρις* and *πέποισις*, and marked by a bias against Miltiades. Ephorus substitutes a hasty and mistaken inference (made apparently by both besieged and besiegers) that an accidental fire on Myconus was a signal that Datis was coming to the relief of the island.⁶⁵ The source of this story is probably an explanation of the proverbial phrase *ἀναπαύειν*. Dr. E. Meyer⁶⁶ has briefly shown how fond Ephorus was of using such proverbs and how untrustworthy is the information drawn from them. In this case it seems fairly clear that the expedition of Miltiades must be placed in 489 B.C. (spring?), since Marathon was probably fought in September, 490 B.C. and there was an interval after the battle during which Miltiades enjoyed his well-earned renown.⁶⁷ Now in 489 B.C. Datis can hardly have been supposed to be lingering in the neighbourhood of Paros. Further, the location of the fire on Myconus may well be a mere inference from the story of Datis' stay there in Herodotus (vi. 118), while the 'in continenti' of Nepos is a sheer impossibility due to another of his gross geographical blunders. We cannot, it would seem, discover from either author the true reason for the failure of the Parian expedition. Here, as elsewhere, Ephorus gives us little more than a plausible but shallow attempt to rationalize the biased and defective tradition preserved in Herodotus.

Lastly, when we come to consider the trial and death of Miltiades, we

⁶² Hdt. viii. 10, 66, etc.

⁶³ Pace Dr. H. Döllebach, *Geschichte der Kriegskunst*, i. 73, 76.

⁶⁴ Hdt. vi. 89, 92, 132.

⁶⁵ So Ephorus, fr. 107. Müller, *F.H.G.* i.

⁶⁶ Nepos (*Mit.* 7, 3) absurdly substitutes for Myconus 'in continenti,' and more probably for Datis 'classicis regis.'

⁶⁷ *Forschungen zur alten Geschichte*, i. 19.

⁶⁸ Hdt. vi. 132.

find the simple narrative of Herodotus grossly perverted by Ephorus. It is true that the charge brought against him of deceiving the people (*ἀπατάει*) is somewhat vague, but it is at least as probable as the treasonable taking of bribes alleged in Nepos (*Milt.* 7, 5) and Justin (ii. 15, 19). And Nepos discredits himself by naming, as the chief defender of Miltiades, his brother Stesagoras,⁶⁸ who had died long before (*Hdt.* vi. 34). Nor does the alleged motive for his condemnation, fear of tyranny, seem to be anything more than a trite moral drawn by Nepos (*Milt.* 8), unless it is a misplaced recollection of the earlier charge brought against Miltiades as soon as he was finally driven from the Chersonese (*Hdt.* vi. 104). In any case we must keep to the bare facts given us in Herodotus (vi. 136) that Miltiades died soon after his trial, and that Cimon paid his fine. The way in which this simple statement was decked out with rhetoric and scandal does little credit to Ephorus, even though he be not the worst offender. Yet we cannot but attribute the origin of the story to Ephorus when we find Cornelius Nepos (*Cimon*, 1) supported in the main by Diodorus (x. fr. 30, 32) and by a direct if scanty quotation from Ephorus in Schol. Arist. p. 515 (Dind.). And the story is that first Miltiades and then Cimon was cast into prison till he should pay the fine, and that the money was eventually procured either by Cimon's marriage to a rich wife,⁶⁹ or by the marriage of his sister Elpinice to Callias, the wealthiest man in Athens.⁷⁰ In all this there is plainly to be seen, first, a desire to heighten the pathos of Miltiades' end, and secondly, a tendency to accept in some form or other the scandalous stories current about Cimon and his sister.⁷¹ We may safely dismiss these later accretions as unhistorical, indeed they are only worthy of mention because they throw further light on the untrustworthiness of Ephorus and are a further proof that we should not follow Dr. Meyer⁷² in supposing all the scandalous stories found in late biographers to be derived from a biographical tradition. Besides the instances already given, the account given by Ephorus of the origin of the Peloponnesian war⁷³ proves to demonstration that the historians of the fourth century were tarred with the same brush as the biographers.

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⁶⁸ The reading is doubtful, but the context makes it fairly certain that Nepos is referring to Stesagoras (*Milt.* 7, 6).

⁶⁹ So Diodorus, x. 32, and apparently Ephorus (Schol. Arist. 515). Müller, *P.H.G.* iv. 642.

⁷⁰ So Corn. Nep. *Cim.* 1, 3, 4.

⁷¹ Cf. E. Meyer, *Forschungen zur alten Geschichte*, i. 25 f.

⁷² *Op. cit.* p. 68.

⁷³ Preserved in Diodorus, xii. 38-40, and by him ascribed to Ephorus. Cf. E. Meyer, *op. cit.* pp. 229-32.

THE NORTH GREEK AFFILIATIONS OF CERTAIN GROUPS OF TROJAN NAMES.

IN the *Quarterly Review* for July, 1916, Professor J. B. Bury writes as follows:—

'The Trojans were doubtless early immigrants from the Balkan peninsula. How comes it that their rulers have Greek names? The name of Priam himself is not indeed obviously Greek, but in its Aeolic form Perramos it may well be so; and Priam's father was Laomedon. Hector is Greek as Nestor, and was in later time the name of a prince of Chios. Paris has the second name of Alexandros; and the natural assumption is that "Paris" was a Phrygian name given him by his Phrygian mother, Hecuba. The names of the other children of Priam who come into the story—Cassandra, Helenus, Deiphobus, etc.—are Greek. We have to choose between two inferences. Either the bards deliberately substituted Greek for foreign names, or the rulers of the Troad were Greek. The second alternative, startling as it may appear, seems to us to accord with other evidence and to afford the most satisfactory explanation of the data of the *Iliad*. If there had been any great or radical distinction between the Achaean and Trojan civilizations it is difficult to see how these could have been completely ignored, or successfully concealed by poets who gave such a faithful representation of the topography and evidently were fully acquainted with the character and resources of the enemy. . . . Is there any good reason to resist the simplest and most logical conclusion that Greeks had conquered the Troes and settled in the Troad, and that Mycenaean Troy was a Greek outpost? Further on Professor Bury writes: 'The Achaeans had reduced the great Greek states of the peninsula, in attacking Troy they go on to reduce a great Greek state which had established itself in Asia Minor. Can we conjecture whence the Greek founders of Troy came? Was it possibly from Attica?' Professor Bury refers to the appearance of the Attic Poseidon, Erichthonios, in the Trojan genealogy and to the legend that Poseidon helped to build the walls of Troy as possible support for his theory.

The connexion of Troy with the Balkans and the Danube has been pointed out by a number of writers in recent years and I have discussed some aspects of this connexion in several papers. I wish to present a point which so far as I know has not been urged before and one which seems to me to strengthen the northern claim as against that of Attica. This is the

coincidence between the typical Trojan names and those which are found most commonly in the ruling tribes of the northern part of the Balkan peninsula. The fact that Priam's son Paris has the Greek name of Alexander has attracted universal attention and only second to this in interest has been the fact that Priam's daughter Cassandra is the feminine of a well known name, Cassander, in the Macedonian royal line. (See Hoffmann, *Makedonen*, 208-209.) In his study of the Macedonians Hoffmann shows (p. 119) that Wilamowitz has been unfortunate in his choice of names used to illustrate his theory that the royal house of Macedon in its eagerness for Greek culture adopted Greek heroic names in order to make connexions with the early Greek tradition. Hoffmann rightly points out that the son of Priam was not a Hellene in the eyes of Macedonians any more than in those of Greeks, and moreover that the names of Alexander and Cassander could not possibly have been given to the Macedonian heirs-apparent in remembrance of the 'Weiberheld' Paris or the 'Unglücksseherin' Cassandra.

I quote Hoffmann further in order to use his argument to strengthen my own thesis.—'It is precisely the names of the great (Greek) heroes of Homer that are rare in the Macedonian families and this should give us pause. If our convincing evidence testifies that the Macedonians were Greeks, why should not the names common with them which also appear in Greek heroic legend have been true and autochthonous Macedonian names?' (p. 20).

I hope to show in the following examination of Trojan names that the same names or names of the same type prevail in and are characteristic of the northern parts of Greece, which are in immediate contact with the Danubian region and trade-route.

The compounds Alexandros, Cassandra, Lysandros, Peisandros, Alkandros (a Lycian ally), names of Trojans in the *Iliad* are by-forms of Alexander, Kaassanor, Lusanor, Peisanor, etc. (Fick-Bechtel, pp. 58 and 60). Such names are especially characteristic of Macedon and North Greece. (See Hoffmann and Fick-Bechtel, *loc. cit.*) In the *Iliad* the great majority of names of this type belong to Trojans and to chieftains, or, in one instance, to a priest's son, whose ancestry belongs to the north directly or in immediately traceable connexion. The one exception is Hypsenor, son of Hippasos, who appears as a Greek in one of those casual lists of the slain in which Homer disregards distinctions made elsewhere. Hypsenor in *Il.* 5. 76 is a Trojan priest of Skamander, to the account of whose death several lines are given, and the sons of Hippasos in the eleventh book (428) are Trojans, Charops and Sokos. The names of this formation which are consistently Trojan are Agenor, Antenor, Bisenor, Deisenor, Hyperenor, Peisenor. Hypsenor is also Trojan when the name is of any real significance, as already noted. There remain in the *Iliad* Agapenor, Elephenor, Prothoenor, and Euchenor. Of these the first, Agapenor, is lord of the Arcadians, who dwell about the tomb of Aepytoe. Wilamowitz (*Phil. Untersuchungen*, ix. 39 ff.) has shown the connexion of this tribe with Thessaly, and I have in other papers (*T.A.P.A.* 1915, 121-128; *C.J.* 1917, 587-592) called attention to them as sharing the epithet 'close-fighting' with the Dardanians, the Mysians in Europe, and the

Myrmidons. Elephenor belongs to the royal family of the tribe of Abantes in Euboea. Their northern method of fighting is noted by Plutarch (*Theseus*, I. 5) and in the Catalogue their fashion of dressing their hair is mentioned in a way recalling the Thracian and Achæan mode. We learn from Aristotle, quoted by Strabo, that they were a Thracian tribe that had been resident in Phocis before coming to Euboea (Strabo, x. 445; Herodotus, i. 146 x). We evidently have to do with persistent racial characteristics surviving among immigrants. The next name of this type is that of Prothoenor, who is mentioned in the Catalogue as leader of the Boeotians. His death occurs in the fourteenth book. He is mentioned in the catalogue along with Arkesilaoe and Klonios, two names of markedly Macedonian character (see Hoffmann's list of Macedonian names, pp. 278 ff.).

There is one Boeotian patronymic of this type, Alegenorides, belonging to Promachos in II. 503. There remains the name Euchenor of II. 13. 663. He is the son of the seer Polyides, about whom Sophocles wrote his play entitled *Mūrres ē Polūidos*, and is of the stock of Melampus, who, according to the form of the legend preserved by Pindar and Diodorus, came from Thessaly.

Of the names of this formation then seven are Trojan, one is given to a leader of the Thracian Abantes, an immigrant tribe with northern characteristics in the island of Euboea, one is a Corinthian whose family comes from Thessaly, one is a leader of the close-fighting Arcadians, another immigration from Thessaly. There is left but one, Hypsenor, who is really Trojan when Homer stops to think, but dies in a casual list of Greeks, a list marked with the carelessness characteristic of books in which the great battles occur.

Another group of names which is almost exclusively Trojan are those ending in *-damas*. They are Adamas, Amphidamas, Eurydamas, Chersidamas, Hippodamas, Laodamas, Poulydamas. These have but one exception to their overwhelmingly Trojan character, namely Amphidamas, which in the tenth book, that book of so many exceptions, is applied to a Cyprian, while in the twenty-third (87) the name is given to a north Greek from Opus, father of the boy slain by Patroclus. These names again show Dardanian connexions and often belong to a priest or mantis. The most celebrated of these is the great Dardanian seer, Poulydamas. There is also Eurydamas, the Dreamer, and Iphidamas, the son of Theano the priestess, and brought up in Thrace. These names do not appear in the royal house of Macedon, as the *-anar*, *-andros* group does, but they are also characteristic of north Greece. The name Polydamas belongs to Thessalian tyrants of Phæria in historical times and a Polydamas of Pharsalos was envoy to Sparta in 375 B.C. Xenophon describes him as hospitable and magnificent in true Thessalian manner (*Hellen.* 6. 1. 3). Another Poulydamas of Skotussa in Thessaly was victor at Olympia in the pancration in 408 B.C. His statue was made for Olympia by Lysippus and legend grew rapidly about his name. (See Frazer, *Paus.* 4. 17 ff.)

I should judge the name Polydamas to be like Alexandros, Alexanor, Amyndros, Amyntas, Alenaa, originally a name for a northern deity, after-

wards given to kingly and priestly personages. The names Laodameia, Eurydameia, Eurydice, and Eurykroousa, have the same history according to Gruppe and other writers on Greek religion. The place names Antandros and Skamandros (the river) belong here.

Another group of names which is prevailingly Trojan is that in which *Lao-* forms the first member. These are Laodamas, Laokoon (not in *Iliad*), Laodike, Laomedon, Laodikos (son of Antenor, in *Il.* 4. 87, but comrade of Antilochos in 17. 699), Laogonos (16. 604; 20. 400) son of the priest of Idaean Zeus in the sixteenth book and son of Bias in the twentieth, and Laodike, daughter of Priam, who bears a name famous in the Seleucid family. Laodameia is the Thessalian heroine and with the second of these names, Laodikos, forms the exception to the rule that these compounds in the *Iliad* are Trojan names. There is a Leiokritos, son of Arisbas, whose name appears in the Ionized form *Λειοκρίτος* and is believed by Hoffmann to come from *Λελο-*, not *Λαό-*.

The names in which *-laos* forms the last part vary between Greek and Trojan, Menelaos being Greek, Erylaos Trojan, Agelaos Trojan in 8. 257 and Greek in a miscellaneous list of Greeks slain in 11. 303, in which appear others who elsewhere are Trojan, *i.e.*, Opheltos, Dolops, and Antemoos. Arkesilaos, a strongly Macedonian name, is leader of the Boeotians with two others, Prothoenor and Klonios.

The frequency of the tribal names in *-ops* among the north Greek stocks is noted by Hoffmann (*op. cit.* p. 131), citing Eduard Meyer and Fick. He quotes Ellopes, Dryupes, Dolopes, Deuropes, the town in Macedon Dourios. With these names he connects the name of Aeropos, the grandfather of Amyntas. Of this type in the *Iliad* are the Trojan names Dryops (20. 455), Charops, son of Hippasos (11. 426), Merops (2. 831), Enops (16. 401; 14. 445), Phaeiops (5. 152; 17. 312). This last name is used of two or more people, always Trojans. Dolopion is priest of Skamander in 5. 77 and father of Eurydamas. Apollo takes the shape of Phaenops, son of Asios, in 17. 583, and of Asios, son of Dymas, in 16. 718. The Charops of the Catalogue 672, husband of Aglaia and father of Nireus, is not a Trojan. Dolops is Greek in the miscellaneous list in 11. 303.

Among the single names that take us to Macedon is that of Argeades Polymeles, an unknown Trojan slain (16. 416) by Patroclus. His name is the one by which the members of the royal family of Macedon, the Argeadae, designated themselves.

Hoffmann comments on the specially Macedonian character of the ending *-tor*. The name Amyntor is noted by him as a true Macedonian formation. Hector is of course of this type as well as Alaster and Damastor, the first of which denotes a Trojan in 5. 677 and in patronymic form is used with Troes in 20. 463, though elsewhere used of a Greek, while the second is used in patronymic form of a Trojan in 16. 416. Well known names among the Greeks of this type are Nestor and Kastor. In 16. 401 Thestor, son of Enops, is a Trojan, but the epithet Thestorides belongs to Kalchas.

The ending *-koon*, which appears as a single name as son of Antenor in

11. 249 and 256, appears to have Thracian connexions. Koon is the son of Theano and is killed, in the eleventh book, defending his brother Iphidamas, who was brought up in the home of their Thracian grandmother. His wounding of Agamemnon at this time is referred to again in 19. 52. Demokoon is a bastard son of Priam, who comes from Abydos. His swift horses are mentioned. Hippokoon in 10. 518 is a councillor of the Thracians and a noble nephew of Rhesos. Darkoon in 5. 534 is in the company of Aeneas and is called the son of Pergasos, a Thracian-sounding name. He is said to have been honoured by the Trojans as much as the sons of Priam, because he was swift to fight among the first. The priest Laokoon, the best-known bearer of this type of name, is not mentioned by Homer. He is called by later writers a brother of Antenor, the Dardanian leader, or of Anchises.

Usener (*Rh. Mus.* 1896, 354) regards these names as compounded with the verb *κᾰῖν*, to hear, and translates Hippokoon as 'Der Rosse wartend'. I think this unlikely, and would suggest that the name may possibly have to do with the word *καῖν* found in Greek inscriptions in Lydia and discussed by D. M. Robinson in the *American Journal of Philology* for 1913, pages 362 following. Two glosses of Hesychius may bring these names in connexion with the god Keas (see *A.J.A.* 1913, p. 366), i.e. *ἑῶν κᾰῖν* = *ἑῶν κᾰῖν* and *τὸ κᾰῖν* = *μῆγα* among the Laconians (Hes. s.v. *ἑῶν κᾰῖν*). Deikoon is mentioned as son of Pergasos, a name which would have the same meaning as Priamos according to the etymology suggested for Priamos on page 47 of the *American Journal of Archaeology* for 1912. I quote as follows from the article on the first instalment of Greek inscriptions from Sardes, published by Professors Butler and Robinson:—'Beia or Berga occurs frequently in the Phrygo-Macedonian languages, and there was a cognate form *pria* or *perga*, the first in Priamos and perhaps in Priene, the latter in *Πέρριμος* and *πέρριος*.'

These groups of names, which are so overwhelmingly Trojan in Homer's use of them, which also have such a foothold in the legend and history of the Balkan area, confirm other evidence which points to that part of Europe from Epirus to Thessaly and the countries along the Danube and the Vardar, which are known by the archaeological remains to have been in contact with Greece, as the European home of the Trojans. Professor Bury rests his argument on the genealogy in the twentieth book and on the later activities of Athens in the Troad. For the Phrygo-Macedonian connexion we have the indisputable tradition of Dardanus and his migration and that of the close-fighting Dardanians and their neighbours, the metal-working Paeonians. Dr. Walter Leaf says in *Homer and History* (p. 72 f.):—'The Phrygian language was closely akin to the Greek and the two nations had doubtless come down together or nearly together from the Danube valley. The Dardanians had taken the south-eastern road, while the Achaeans had passed on south-westwards.' Hoffmann argues that the Macedonians were Greeks. Kretschmer, with the same view as that of Leaf, states the case more justly than Hoffmann. He says (*Einführung*, p. 288) that we should regard

the Macedonians as a people closely related with the Greeks, who if they had turned toward the south could have become Hellenic no less than the Dorians, Thessalians, and Boeotians. But they spread out toward the north and absorbed a number of non-Greek races and so became alienated from the Hellenic race as it developed within the southern peninsula, and therefore they were denied the name Hellenic. The names of the northern area appear in Sparta especially.

The most interesting group of northern names consists of those which are obviously connected with deities. No name is more firmly rooted in Macedon, Epirus, and Thessaly than Alexander. The by-form of this, Alexenor, is a deity worshipped in connexion with Asklepios and in the form Alexenor is quoted by Hesychius from Aristophanes as an epithet of Asklepios. Another verb of apotropaic meaning, i.e., ἀμύρω, gives the names Amyntor, Amyntas, and Amyntandros in Macedon, Thessaly, and Epirus, while a tribe Amyntae is quoted as living in Thesprotia. In Athens the Amyneion and the god Amynios worshipped with Asklepios testify to the religious value of the word. The great Thessalian family of Aleuads have their name from Aleuas from the apotropaic verb ἀλέω, and I have discussed the verb ἀλέω in *Classical Philology* for June, 1918, in considering the derivation of the word ἀλέκτρον. Names of this sort are appropriate to the time when, as Halliday says in his book on Greek Divination, the connexion between mantosuné and royalty was close. I quote him on this subject:—'Indeed the kings of the legendary past were manteis, and they possessed the other functions of that office no less than the power of "cleansing from blood" (p. 68); . . . And like Salmones and Atrous the manteis were connected with the weather, or the sun . . . The parentage of Medea and Circe shows the children of the sun as magicians and prophets' (p. 70).

Herodotus tells a story of the founding of the kingdom of Macedon by a bit of sun-magic on the part of Perdicas, the little shepherd who became the founder of the Macedonian house of kings. It is probable that the name of the Sun Elektor comes from the verb ἀλέω, which has also produced the name for that notable amulet, ἡλεκτρον, amber.

These sacred and royal names, Alexandros, Cassandra, Eurydamas, Poulydamas, and others, which could be shown to have the same psychological meaning in origin, are characteristic of the Balkan area as well as of Troy. I believe that they indicate that Homer preserved a genuine tradition of Trojan names and that the coincidence with north Greek names, especially of the Macedonian type, cannot be accidental, but adds weight to the other evidence for the Danubian provenance of the Trojans, or at least of the Dardanian inhabitants of Troy during the splendid time of the sixth stratum and at the time of the Trojan war.

I have not given a complete list of all the distinctively Trojan names, but rest my case chiefly on the names of the Antenor-Antandros, Alexenor-Alexandros, etc., type, together with those of the Poulydamas type and those which show the ending -ops. I attach importance also to the appearance of the name Argeades among the Trojans.

The names are interesting, not only from the historical, but also from the religious aspect.

The northern gentile names Dardanus and Paconides are used naturally by Homer for individuals on the Trojan side.

The great name of Hector does not appear in the royal house or among the noble families of Macedon. A Macedonian of that name, 'Parmenionis filius, in paucis Alexandro carus,' is mentioned in Curtius 4. 8. 7; 6. 9. 27 (Hoffmann, *op. cit.* 207). An intentional choice of the name of the weak Alexander-Paris cannot be imputed to the Macedonians, and the great frequency of the name of Hector's brother, while his own does not appear, must be due to the strong religious meaning (protector) which is seen in Alexandros, Amyntas, and Aleuas, epithets attached in one form or another to many deities of healing whose worship originates in the Balkan and Danubian region.

GRACE HARRIET MACURDY.

A BRONZE HEAD OF THE FIFTH CENTURY B.C.

[PLATE I.]

I.

A GENEROUS gift to the Ashmolean Museum, from Mr. E. P. Warren, has not only allowed the art-lovers of Oxford to enjoy an exquisite work of art, but has also enabled students of Greek sculpture to attain to a fuller knowledge of the style and technique of the great schools of the fifth century B.C. Our head appears to have been broken off a statue; unfortunately it is not complete. And as it had to be put together and bent into shape, any measurements will be of little value. I may however record some of them:

				Me.	Inches.
Height from hair to mouth	...	...	...	118	4½
Circumference at band	...	...	...	550	21½
Length of nose	...	...	...	57	2½
" mouth	...	...	...	47	1½
" eye	...	...	...	33	1½
" left ear	...	...	...	52	2½
Height of forehead	...	...	...	55	2½
Thickness of bronze, about	...	...	...	10	¾

Antique is, most of the hair, both ears, the left eye, the nose, the upper lip. I have indicated in Fig. 1 what parts are antique. Generally speaking, the right side of the face, and the lower lip, the chin and the neck are modern. The head came from the second portion of the Forman Collection, which at the sale, unlike the first portion, was very indifferently catalogued. It consisted of nine bronze fragments, fastened to a background of plaster. The thickness of the bronze was about $\frac{3}{4}$ of an inch. The fragments were reset on a stone core by Mr. F. Bowcher, and the missing parts replaced in beeswax by him, under the direction of Mr. E. P. Warren and Mr. J. Marshall. Mr. Bowcher had specially before him a cast of the Diadumenus head of Dresden (below, Fig. 3). Whence the fragments originally came cannot be ascertained: it is probable that they may have come from some important excavation in Greece, as they could easily have been concealed by workmen.

The restoration is very successful; and as it is carried out in wax only, new parts can never be mistaken for old.

The head represents, in life size, a boy who was no doubt a victor in one of the great athletic festivals of Greece. As the ears are undamaged, he was probably not a boxer or pancratiast; perhaps a runner or pentathlete. He is represented as binding his hair with the fillet of victory. This



FIG. 1.—RESTORATIONS OF BRONZE HEAD.

restoration is certain in view of the character of the head-band and the likeness to other Diadumeneus heads. Mr. Bowcher, in his restoration, has taken this view, and has carried the fillet further; but of course this restoration furnishes no evidence. The eyes, as is usual in bronze statues, were filled in in paste.

The secret of the charm which clings to the head, and which every one who examines it seems to feel, is the extremely pleasing and delicate character of the curls, the eye and the ear. The process by which it was produced is beyond doubt that known as the *cire perdue* process. The wax model was enclosed both within and without by moulds of terra cotta or plaster: the wax was then melted out and bronze poured in in its place: after which the moulds were removed.¹ As Mr. Bowcher has been able exactly to imitate in wax the lines of the hair, the eye and so forth, in his restoration, we need not suppose that much engraving of the surface after the casting was necessary, but the whole was gone over with the tool. The casting of the almost detached curls on the forehead must have been difficult.

But no doubt the most striking feature of the head is the head-band, which is adorned with a line of palmettes, like the head-band of Hera, on the coins of Elis, Chios and Argos. The device was inlaid in silver, but the silver has disappeared, except at a few points. The pattern was traced by an engraving tool; and it can be clearly traced, because the silver saved from oxidation: the bronze under it, while the rest of the bronze surface suffered from decay. The nearest parallel to this decoration is offered by that of the Delphic Charioteer: but the parallel is not close. The Charioteer's fillet is adorned with a meander-pattern, deeply cut. The bronze head at Munich, to be later mentioned, also has had inlays of silver in the fillet.

The curls by the ears and on the temples are like those of the Delphic Charioteer in the same places, curling boldly, almost detached, and reminding us of a time when such curls were made separately of bronze and soldered on.

Few bronze statues and life-size heads of the fifth century have come down to us. The works with which our head may best be compared are the well known Idolino of Florence, and the beautiful boy's head of the Louvre from Beneventum.² Both of these are Greek originals, and both have justly won great admiration. Yet if we compare the new head with them, point by point, we shall find that it greatly surpasses them. Let us consider some of the details.

The upper eyelid overlaps the lower at the outer corner of the eye. This custom of representation was coming in in the middle of the fifth century: after which it is usual. But as our bronze was broken across the eye, the putting together of the two lids is somewhat arbitrary.

The nose is short, and the end of it rounded. One might suppose that it had been somewhat forced out of shape, but that it is like other noses of the mid-fifth century: the small and narrow nostrils, forming a strong angle one with another, closely resemble those of the Delphic Charioteer. The upper lip is notably short.

The ears are carefully formed: the cartilage just before the opening

¹ Compare E. A. Gardner, *Handbook of Greek Sculpture*, ed. 2, p. 25.

² Collignon, *Hist. de la Sculpt. gr.*, vol. II. *Primitifs*.

is decidedly prominent: this is not the case in the Louvre head, and the cartilage of the *Idoline* is notably flat: in the Nelson head, which is in character nearer to bronze than other heads of the class, we have the same prominence of cartilage. Modern scientific art-criticism attaches, as is well-known, especial importance to the form of the ear in painting and sculpture, as a characteristic trait of the artist.

The upper lip has a marked ridge; no doubt the red of the lip was plated with silver or gold.



FIG. 2.—TOP OF HEAD.

A noted feature of the hair is its arrangement in curled locks, arranged in a circle about a point on the top of the back of the head (Fig. 3). The nearest circle of curls is something like a star-fish in form. Although in case of our head this nearest circle is partly restored, yet enough survives to show the arrangement in the restoration to be correct. The part restored is darker in colour.

I have tried to compare various fifth century heads with our bronze in this respect. The comparison was not easy, because it has not been the custom to represent in illustrations the tops of heads. I had therefore to trust to casts, the number of which was limited.

The star-fish arrangement of hair, if I may so call it for brevity, appears in rudimentary form on the head of the bronze charioteer of Delphi; although there the relief is very low, and the curls are rather engraved than standing out. It is also discernible in the head of the so-called 'Heroic King' at Munich, whom I believe to be Themistocles.³ It is fully developed and dominant, not only in the case of the two above-mentioned



FIG. 3.—MARBLE HEAD AT DRESDEN.

bronzes, but in the Cassel head of the Diadumenus, and the Vaison statue of that type, in the Nelson athlete head,⁴ the boy athlete of Dresden,⁵ and other heads of Polyclitan type; but in marble statues of the class, the hair is seldom carefully copied: thus in the heads of the Farnese Diadumenus and that from Delos, one cannot trace the arrangement of the hair quite satisfactorily. In fact the tracking of a technical detail of this kind from

³ *Cyrella Numismatica*, p. 100.

⁴ *J.H.S.* 1898, Pl. XI.

⁵ *Portwanger, Masterpieces*, p. 200.

figure to figure soon shows one how careless and untrustworthy are the copies of fine Greek originals made for the Roman market.

Certainly the whole way of representing the hair, which is fairly homogeneous in the whole class of fifth century works of which I have spoken, is entirely changed in the statues of the great artists of the fourth century, both Attic and Argive. In such statues as the Hermes of Praxiteles the Eubuleus, the Agias, the bronze statues of men from Anticythera and Ephesus, the hair appears as separate locks standing out from the head, not as strands lying in relief on the surface of the head.

There exists a considerable series of works in marble which in the arrangement of the hair and in the head-band so closely resemble our head that we must clearly assign it to the same group. The best of these are a Diadumenos head in Dresden* (Fig. 3) which is of very detailed and accurate work, and one in the British Museum, less well preserved. Another head, of the same class, but less carefully finished, is that in Cassel. Furtwängler mentions other inferior heads of the same class†. They all repeat in essentials the head of the statue from Vaison, which has long been regarded as a Roman copy, though a poor one, of the Diadumenos of Polycleitus. This gives us a fixed point from which to start; and establishes a probability that our head is in type Polycleitan.

That this arrangement of the hair is peculiar to the Polycleitan group, I am not in a position to say. But so far as I have been able to observe, it does not occur in statues distinctly Attic, such as the boy's heads in the Acropolis Museum Nos 689 and 698 of Dickins' Catalogue. Both of these however are decidedly earlier than the new head. Nor does it exactly occur in the Massimi head of Myron's Discobolus, nor in the very beautiful boy's head in bronze at Munich‡ which is accepted as a fifth century original, though of uncertain school; and which dates from the latter part of that century.

II.

It is an interesting study in archaeological method to trace from decade to decade the gradual discovery of the works of the Polycleitan school. The discovery began with the identification by Friederichs in a figure of heroic size from Pompeii, now at Naples, representing a sturdy youth, a Roman copy of the Doryphorus or spear-bearer of Polycleitus, mentioned by Pliny. Soon afterwards the Diadumenos of Polycleitus, again mentioned by Pliny, a youth binding his head with the fillet of victory, was also identified in the figure from Vaison, the attitude and bodily forms of which are almost

* Furtwängler, *Museopiscina*, Pls. X. XI., 1895, Pls. XI. XII.
p. 240.

† *Cat. Br. Mus.* No. 2729; *Revue Archéol.* Hammer in *Rom. Mythol.* x. 103.

‡ *Cat. of Glyptothek*, No. 457; compare

identical with those of the Naples Doryphorus. A replica of this figure, of Hellenistic work, has come to light at Delos.

A careful study of some of the bases of statues still extant at Olympia, and bearing on the top the marks of the feet of the figures upon them, has enabled Professor Furtwängler to go a step further. These marks determine the attitude of the statue: Furtwängler found in our Museums several figures whose attitudes corresponded; and as their heads were of the type of the Doryphorus head, he identified them as Roman copies of the Olympia figures, or at all events as kindred to them. These copies represent in some cases victorious boy athletes, and about some of them there is an undoubted charm, especially about such statues as the Dresden, the Barracco and the Westminster figures.⁹ Plato tells us of the young Theætetus that he was not beautiful in feature, but he was brave, intelligent and modest, and earnest in the performance of duty. In the *Clouds* of Aristophanes we read of a class of young men who are models of *alôôs*, and in all things opposite to the forward and flashy youths of fashion. Such are the youths represented by Polycleitus, only that their outward form corresponds better than in the case of Theætetus to the beauty of the soul within.

An anatomist will hold that the development of the bodies of these youths is far too mature for their age; but we must remember that under the sun of Greece and in the constant exercises of the palaestra the male body would develop at a far earlier time of life than in our colder climate and under our more sedentary habits. The body of a Greek boy was not white, but red, through exposure to the air, and far nearer to the simplicity of primitive man.

The identification of these youths, scattered through the museums of Europe, has tended greatly to raise our appreciation of the master. So long as we had only the Roman copies of the Doryphorus and Diadumenus to go by, it was not easy to make a modern eye, at all events, satisfied as to his artistic supremacy. We felt these figures to be heavy and somewhat dull; and it was very probably in view of them that Pliny repeats the criticism, no doubt borrowed from some Greek authority, that the athletes of Polycleitus were too square made and too monotonous in type. In the Roman copies they lose the charm of exquisite finish of detail which the originals doubtless possessed, and the *Idolino* in particular suggests that the solidity of the two canonic figures was by no means an invariable character of Polycleitan athletes.

But Furtwängler did not stop at that point; he went on, without adequate data, to fix the dates of the Polycleitan statues of athletes; and in so doing failed. He assigned the statue of the athlete Cyniscus, the basis of which was found at Olympia, to B.C. 440, and the statue of Pythoelæus, of which also the basis was found, to B.C. 430. But we now have unimpeachable authority, in the papyrus published by Grenfell and Hunt, and commented by Robert,¹⁰ as to the dates of the victories of these two

⁹ Furtwängler, *Masterpieces*, pp. 229-230.

¹⁰ Robert in *Revue*, 1900, p. 141.

athletes, on which occasions, no doubt, their statues were set up. The dates in the papyrus are, for Cynisus B.C. 460, for Pythocles 452. Furtwängler's dating is thus upset; and the *floruit* of Polycleitus must be thrown back.

We must not, however, overlook certain difficulties which beset the attribution of our head to the Polycleitan school. It has long ago been observed that the head of the Diadumenus generally given to Polycleitus is of quite a different type from the head of the Doryphorus of the same artist. The Doryphorus head is deep from back to front, flat on the top, square in profile. This has been regarded as the normal head of the school; and the statues of boy athletes and the *Idolino* have mainly on the ground of having heads of this type been given to the school of Argos. But the head of the Diadumenus is notably of another character, much more rounded and softer. While the bodies and attitudes of the Doryphorus and Diadumenus are scarcely to be distinguished, the heads are far apart; and it has been recognised that the Diadumenus head is much nearer to the Attic type. Archaeologists such as Furtwängler have accounted for this by supposing that in later life Polycleitus came more under the influence of the great contemporary Attic schools of Myron and Pheidias. The explanation is scarcely quite satisfactory; but it is hard to suggest a better.

In fact there is another type of Diadumenus which is often regarded as Attic. This is the Farnese Diadumenus of the British Museum, which differs from the Vaison figure in pose. The Vaison figure is moving forward, in the act of transferring his weight from one foot to the other: the Farnese figure is standing in a stable position, with feet flat on the ground. The heads of the two figures do not greatly differ; and it has been noted by archaeologists that these heads are both of the Attic type, soft and rounded, and not of the severer and squarer Dorian type, to be found in statues of the Doryphorus.

In one point our head agrees more closely with the Farnese than with the Vaison type. The fillet on it is already knotted at the back: this is clear in our original, though part of the fillet is restored. After tying the knot, the boy is still holding in his hands the two ends of the fillet. The Vaison athlete is only preparing to tie the knot. But when we look at features, there is no likeness between the Farnese head and ours. Eye and ear are markedly different. And the hair of the Farnese head being very superficially rendered, and the nose restored, it presents in these points no likeness to our head. We find indeed a contrast rather than a parallel.

Brunn regarded the Vaison and the Farnese Diadumenus as both Polycleitan. Most archaeologists recognise a distinction, regarding the Vaison type as Polycleitan, the Farnese type as Attic: and a parallel to the standing attitude of the Farnese figure has been found among the youths on the Parthenon frieze. It has also been noticed, with justice, that a firmly standing attitude is far more appropriate to the action of binding one's hair with a fillet than is the walking attitude of the Vaison figure: whence some archaeologists have been disposed to think that the type originated in the

Attic school of Pheidias,¹¹ and was copied in Argos, being transferred to a less satisfactory pose which we know from the copies of the Doryphoros to have been Polycleitan.

I do not think that this criticism is at all conclusive. The Farnese statue is a very poor work, and not to be trusted for the reproduction of details. The attitude occurs not only in the Parthenon frieze, but in works of decidedly Polycleitan character, such as the *Idolino*; and the head, though of soft and rounded type, is not more soft and rounded than the head of the *Vaison* and *Delos* statues. It would be absurd to suppose that so great and so prolific a sculptor as Polycleitus would confine himself to one attitude and one type of head. I am therefore disposed to revert to the view of Brunn, and to regard the two types as two variants of Polycleitan originals. If, as Furtwängler maintains, Polycleitus could copy an Attic type for his heads, he might just as well copy it for a figure in the Farnese attitude as for a figure in the *Vaison* attitude.

Some of my friends have urged me to avoid unnecessary modesty by boldly claiming our head as belonging to the original *Diadumenos* mentioned by Pliny. To this claim, however, there are objections, which I think fatal. If the *Vaison* and *Delos* statues are evidence, the Polycleitan *Diadumenos* was a fully developed young man, not a boy; and he was on the heroic scale, larger than life. Pliny speaks of the Polycleitan figure as *molliter juvenis*, and the term *juvenis* does not suit our head. We must be content, therefore, to call our head a work of the school of Polycleitus, though it may quite possibly be part of one of the many Polycleitan statues of boy athletes.

Thus taken by itself, our head would be regarded as of Attic type, with rounded outline and brachycephalic. Yet it probably belonged to a statue of the Polycleitan class.

In any case its delicacy and beauty enable us to appreciate more fully than before the technical perfection reached by the great bronze-casters of Greece in the middle of the fifth century. Hitherto we have found it somewhat difficult to understand the immense reputation which the athlete statues of Polycleitus enjoyed in Greece. But we must remember that a copy in marble necessarily loses most of the character of a bronze original. The fine and delicate treatment of the hair, the ear, the eyelids, cannot be reproduced in the softer and coarser material.

We can now well understand how a full length figure produced by the very fine and delicate process called the 'lost wax' process, by such an artist as modelled in wax our new head, would be a work of the most remarkable and fascinating beauty. The Greeks appreciated the points of a body in a way which we do not readily understand. Plato observes that when a painter has to represent a landscape, mountain, wood or river, he is content merely to make suggestions. 'Since,' he observes,¹² 'we have no

¹¹ It has even been suggested that the Farnese figure is a copy of an *Asandumenos* by Pheidias, set up at Olympia.

¹² *Critias*, beginning. Quoted in my *Preludes of Greek Art*, p. 20.

accurate knowledge of such things, we do not closely examine or criticise the paintings; we are content in such a case with a vague and delusive rendering. But when the artist tries to represent our bodies, we keenly perceive the defects, and, in virtue of our constant close observation, become severe critics of one who does not render in all respects an accurate likeness.' Plato is of course not merely speaking of the face of a man, but of his whole body; and if we remember this we shall realise how contrary the Greek point of view is to that usual in modern days. We look very carefully at all the features of nature; but of our own bodies we know but little; we are generally disposed to be ashamed of them. Of the points of beauty and ugliness in dogs and horses we have a far more definite notion than in the case of human beings. Of course we shall never go back altogether to the Greek point of view; yet it would be no bad thing if we could learn in the school of Polykleitos to appreciate more fully the beauty of the well trained male body.

P. GARDNER.

A VASE FRAGMENT FROM ORVIETO.

PERHAPS an apology is due to the readers of the *Journal of Hellenic Studies* for venturing to call their attention to so fragmentary a vase as the one depicted in the accompanying illustrations, Figs. 1, 2; the excuse must be that the design offers certain points of interest which make one regret its mutilated state.

All that are preserved are the stem and part of the interior design, cm. 5.5 x 4.8, of a r.f. kylix which was purchased at Orvieto and purports



FIG. 1.

to have been found there. The clay is fine and well worked, the black varnish of the stem of a brilliant lustre. Of the exterior design there remains only a small section of the ring indicating the ground, and one long, slender foot.

The scene of the interior shows a seated man with his right leg raised and left arm extended; over this arm hangs a mantle, his sole drapery, drawn with broad folds and extremely parsimoniously sown with dots. The bold thick relief line of the limbs is vigorously rendered: the hair on the

chest and inner markings of the muscles are of golden brown thinned varnish. In the field is a *kappa* and the rounded end of some object, both in purple.

Although little remains there is nevertheless enough to enable one to form some estimate of the place to which this fragment belongs; yet since the freedom and mastery of technique exclude the earlier artists, it must necessarily be assigned to the cycle of the latest masters of the severe style.

The nearest affinities are vases in 'the style of Brygos': the wide folds, sparing use of dots, and naturalistic ends of drapery may frequently be instanced.¹ Still more distinctive is the delineation of the collar-bone, not rendered after the manner of Douris by two strokes with hook-shaped



FIG. 2.

ends,² nor in the very individual manner of Kleophrades,³ but by a simple Y-shaped line. The nipple is indicated by a slight stroke, but more characteristic is the hair on the chest, which can be closely paralleled by the Zeus of the Boston kantharos, the Aristokrates of the British Museum kylix, the bearded man of the Würzburg vase,⁴ etc. Another mark of identification is the 'Brygos' form of eye, described by Perrot as a *triangle isocèle*.⁵

¹ Cf. Zeus of the Boston Kantharos (P. R. Tarbell, *The Decennial Public.* [of the Univ. of Chicago], vi. 1902, Pls. II., III.).

² Cf. E. Pottier, *Douris*, Figs. 6, 10, 11, and 21.

³ J. D. Beazley, *J.H.S.* xix. 1910, p. 42, Fig. 1.

⁴ Hartwig, *Meisterschalen*, Pl. 34. Part: wangler-Batchhold, *Griech. Vasenmalerei*, Pl. 50. Cf. also the seated man of the Vienna skyphos, F.-R. Pl. 84.

⁵ G. Perrot, *Hist. de l'Art*, x. 1914, p. 326 and Fig. 201, No. 23.

The fragments at Stuttgart in Hauser's possession⁶ were found at Orvieto, as also the vase in Vienna,⁷ the fragments in Hartwig's own collection and the kylix in the Faina collection,⁸ where there is a strong resemblance between the nude man of the exterior design and the man shown on our fragment in the rendering of the collar-bone, hair on chest, nipples and type of face.

A very close parallel is the broken sherd from the Acropolis⁹ showing an agitated man leaning on a staff, but clasping his head with his right hand. In this case, also, his mantle covers one arm only, and the bodily forms and facial type are nearly akin to our subject. Genre scenes, indeed, often form the theme of the interior design of vases in the style of Brygos.

Although we lack conclusive evidence which would justify us in definitely attributing this work to Brygos, nevertheless the striking resemblance between its style and those of authenticated vases by the master shows that if not from his own workshop it was executed at a contemporary date and under his influence.

E. DOUGLAS VAN BUREN.

ROSE, *May*, 1918.

⁶ Hartwig, *op. cit.* p. 318, Fig. 42, and p. 349.

⁷ Hartwig, *op. cit.* Pl. 36, 1-3.

⁸ Hartwig, *op. cit.* p. 328. *A.-E. M.* 1893, pp. 129 ff.

⁹ Klein, *Euphrosyne*, 2nd ed., p. 92, Fig. in text.

THREE RED-FIGURED CUPS.

[PLATE II.]

I

THE vase-painting published after a photograph in PL. II. 1, and after a drawing in Fig. 1, has already been reproduced on p. 86 of my *Vases in America*; but it lost so much in reproduction that I considered it my duty to republish it as soon as possible in order to correct the unsatisfactory impression which the previous publication must have made; the editors of the *Hellenic Journal* have kindly offered me these pages for the purpose.

The painting forms the internal decoration of a fragmentary red-figured cup found at Cervetri and now in the possession of Mr. Edward Warren at Lewes. The stem and foot of the cup are lost, but the stem at any rate was of the normal type. The exterior was undecorated.

A naked woman is moving quickly towards a column-krater, wreathed with ivy, which stands on the ground in front of her. In her left hand she holds a kotyle: her right arm was extended behind her downwards, and her right hand may have held another object, such as a cup or a jug. Part of the left shin is preserved: the left leg evidently passed behind the right and was strongly flexed at the knee. The hair is cut short, but a fringe of ringlets runs round the lower edge: the outer edge, which is crenate, is separated from the black background by a reserved line. A red line, gently curving, and turned up at the forehead, represents a fillet. The whole contour of the figure and of the vessels is lined in with relief-lines against the background. Yellow thinned varnish is used for the transverse creases at the waist, and for the necklace and its dotted pendant, which are visible in the drawing, though not in the photograph. Round the figure, the fragmentary inscription - -{O} KALQ[s], the two last letters being written on the krater. On the kotyle, ΔΟΡΙΣ. Both inscriptions are in red. The alpha is open at the top: the diagonal strokes of the kappa do not touch the upright: the rho has a short tail: the delta is of the normal form. The line of the ivy wreath is brown, the leaves black. The picture is surrounded by a band of stopped meander pattern.

At first sight, the inscription ΔΟΡΙΣ might seem to give the artist's name: the cup would be the work of the vase-painter Douris. But the style

is not that of Douris, either in his earlier, or in his later, longer, and better-known period: those who are acquainted with the work of the Panaitios painter will recognise, in our cup, the hand of that excellent artist (see *Vases in America*, pp. 82-87).

The word ΔΟΡΙΣ is not followed by *εργαστην*, and there is therefore no proof that it was intended as an artist's signature. Mr. Warren suggests to me that it characterises, not our cup itself, but the kotyle held by the woman, as a work of Douris: a complimentary, almost dedicatory, inscription like the



FIG. 1.—R. F. CUP IN COLLECTION OF MR. EDWARD WARREN.

ΣΟΙ ΤΕΝΔΙ ΕΥΘΥΜΙΔΕΙ on the hydria by Phintias in Munich* (F.R. Pl. 71; Hoppin, *Euthymides and his Fellows*, Pl. 28, above). Other explanations might be given; but this seems to me as attractive as any. It is possible that the same interpretation may apply to the ΟΔΟΡΙ (ὁ Δοῦρι) on the cup published by Miss Harrison, which was formerly in the Tricoups collection and is now in the Museum at Athens (*J.H.S.* X. Pl. I). But it is equally possible that the ΟΔΟΡΙ was written by the painter of the cup. The determining factor, in both the Athenian cup and ours, is the style of the drawing.

The fragmentary love-name on our cup need not have been, but very likely was, Panaitios. The date is between 490 and 480: say, 485. The style seems a trifle more advanced than that of the cup in the British Museum which the Panaitios painter decorated for Euphronios (E 44: F.R. Pl. 23).

II.

The vases which bear the signature of Douris may be divided into three classes. The first class consists of the unpublished cup with the love-name Chairestratos (Louvre G 122); the Vienna arming cup, painted for Python (F.R. Pl. 53); the Boston Chairestratos cup from Corneto (Hartwig, *Meisterschulen*, Pl. 21), and the two fragmentary cups in Berlin (2283 and 2284: A.Z. 1883, Pl. 1-2), one of which bears the love-name Panaitios and the manufacturer's name Kleophrades, the other the love-name Chairestratos and the artist's signature. The second class consists of one vase, the Berlin cup 2286 (A.Z. 1883, Pl. 4: A. new, *Jahrbuch*, 31, Pl. 2); the third, of all the rest. The first and earliest group is characterised, among other things, by the rendering of the collarbones and of the hip-furrow: the lines of the former stop at the pit of the neck and have no hooks at the ends; the latter appears as a single gentle curve. In the third series the collarbone lines end in hooks, and the hip-furrow is composed of two quite distinct curves. In the third series, earlier and later can be distinguished, and chronological groups can be formed, as Buschor has shown in his excellent article 'Neue Douris-Gefässe' in *Jahrbuch*, 31, pp. 74-95; but the whole group is remarkably homogeneous.

There remains the second group, the Berlin symposium cup. Buschor (*loc. cit.* p. 89) classes it with four other signed cups which I should consider to be typical examples of my third group, and with which it does not seem to me to have much in common. Again, I cannot put it in my first group, for one reason, because its style is obviously later: nor between the first and the third, because the transition from the Berlin Panaitios and Chairestratos cups (A.Z. 1883, Pl. 1-2) to the vases of the third group seems to be easy, straightforward, and long-prepared, whereas the Berlin symposium cup would send the artist on a circuitous route. To put it after the third group would not occur to anyone: the latest work of Douris is to be found, as Buschor shows, in such unsigned vases as the Boston thiasos cup (Hartwig, Pl. 74-75: see also *Vases in America*, p. 99).

The Berlin symposium cup does not stand alone: Moiseff has already pointed out another work of the same style, the pelike fragments in the collection of the Russian Archaeological Society at Petrograd (*Zapiski Russkogo Arkheologicheskogo Obshchestva*, 1913, Pl. 2, 2; *Jahrbuch*, 31, pp. 76-77). Buschor and Hauser added three other vases, a stamnos and two Nolan amphorae (*Jahrbuch*, 31, pp. 75 and 93).

Working independently of these scholars, I had reached a conclusion which tallies, up to a certain point, with Buschor's. I had not seen his

article when I compiled and sent to press the list of vases by 'the painter of the Louvre Triptolemos stamnos' which appears in *Vases in America*, p. 98, note L. This list includes, as numbers 1, 4, 5, 7, and 11, the five vases grouped together by Buschor, and it is gratifying to find that we are so far at one. A group of vases in what is unmistakably the same style, and one of them signed by Douris: Buschor drew the natural inference that all five were by Douris: I, owing to the extreme difficulty of fitting the symposium cup into the work of Douris, detached it from his work and conjectured the signature to be an ancient forgery. That Buschor's theory is at first sight the more plausible I do not deny: but that mine has great advantages I hope, at some later date, when my material is collected, to be able to show.

III.

Klein's list of vases signed by Douris numbers twenty-four (*Meister-signaturen*, pp. 150-161): the most recent list, that compiled by Frucht (*Die signierten Gefässe des Douris*, Munich, 1914), gives thirty-four: deduct the Berlin symposium cup, and add the cup in the Kunstgewerbe Museum at Dresden (A, a man leaning on his stick, holding out a purse, with *Δοῦρις ἐγραφεῖν* and *Χαιρεστράτος καλός*; B, men and youths), and the total remains the same. It is generally recognised that we have a great many Douris vases besides the thirty-four signed ones. Hartwig, in his *Meisterschalen* (pp. 200-230 and 583-627), attributed thirty-five unsigned vases to Douris, the majority of them for the first time: to which we must add the fragment in the Kopf collection which he published some years later (*Festschrift für Brandorf*, p. 86). Of these I should admit all but five: numbers 32, 36, 38, 43, and 59 in the list on p. 686 of *Meisterschalen*. This gives a total of sixty-five Douris vases. Van Branteghem assigned to Douris the lekythos with the love-name Chairestratos which was once in his collection and is now in Boston: Pottier the two fragmentary cups G 126 bis and G 125 in the Louvre (*Catalogue des vases du Louvre*, pp. 967 and 968); Hoppin the thiasos cup in his possession: D. M. Robinson his late symposium cup. De Ridder attributed to the workshop of Douris the cup 540 in the Cabinet des Médailles (*Vases du Cabinet des Médailles*, Pl. 21, and pp. 408-410 and 379): the Boston cup with a woman at a laver (97, 369) was pronounced to be in the style of Douris by the authorities of the Boston Museum. Buschor showed, in the article already mentioned, that a number of unsigned vases collected by Hartwig (*Meisterschalen*, p. 657), but attributed by him to an imitator of Douris whom he christened 'the Master with the Spray,' were really late works of Douris: the same view was tentatively expressed in *Vases in America* (p. 99). Hartwig's Spray group consists of nine numbers (*Meisterschalen*, p. 691): number 1, the astragalos in the Villa Giulia (*Bollettino d'Arte*, 10, pp. 345 and 346), is to be cut out; it is by the Syriskos painter, whose works are given in *Vases in America*, pp. 64-65: the rest may remain.

Eleven new attributions were made in *Vases in America* (pp. 97-99), and the list may be increased. The following cups seem to me the work of Douris.

Lewes, Mr. E. P. Warren, fragment: A, male pursuing woman; all that is preserved of B is a number of legs.

Palermo, from Chiui. A poor reproduction in Inghirami, *Museo Chiusino*, Pl. 109-111: A, seated man; B, athletes and men. This cup is especially interesting because it is in the same style as the signed athlete cup in London (B.M. E 39: W.F. 8, 1: A, Murray, *Designs*, No. 24: B, *J.H.S.* XX. Pl. 12). The border in the interior is a simple line.

Florence, from Chiui: A, man reclining holding an oinochoe; B, symposion. The border on A is of the most usual Dourian type, as in Murray, *Designs*, Pl. 9.

Louvre, S. 1327, fragment: A, a youth wearing a himation, and part of another figure. Hardly anything remains of B.

Oxford, fragment lent to the Ashmolean Museum by Mr. Stuart Jones: from Orvieto: B, figures wearing himatia.

Adria, B 500, from Adria, fragment: A, a man seated holding a lyre, and a youth; B, figures in himatia.

Würzburg, fragment: B, men and youths.

Würzburg: A, symposion: a man reclining, and a woman standing in front of him holding oinochoe and cup. $\kappa\alpha\lambda\omicron\varsigma$, the letters very close together. Late.

Corneto, Count Bruschi: from Corneto: A, man and youth standing facing; B, men and youths. The border on A is an ordinary meander by twos with Dourian cross-squares. Late.

Orvieto, Count Faina, 60: from Orvieto, fragmentary: A, symposion: man and woman on a couch. $\kappa\alpha\lambda\omicron\varsigma$. Late. The border on A is of the type shown in Murray, *Designs*, number 34.

The reverse of the London cup (B.M. E 60) is an imitation of Douris by a weaker artist.

That Douris painted other vases besides cups is shown by the signed kantharos in Brussels and the signed psykter in the British Museum. A lekythos in Boston has been assigned to him, as stated above, by Van Branteghem; and another lekythos is attributed to him in *Vases in America*, p. 98. The class of the lekythoi which bear the word $\Delta\omicron\rho\iota\varsigma$ without $\epsilon\pi\alpha\theta\epsilon\tau\epsilon\nu$ is a difficult one: they may or may not be by Douris. Hartwig assigned to him a fine fragment of a pyxis in the British Museum (E 807: *Meisterkatalogen*, p. 625): there is an excellent pyxis by him, with Menelaos pursuing Helen, in Mannheim. Two lion's head rhyta, one in the British Museum (E 793: Walters, *History of Ancient Pottery*, 1, Pl. 46, 5: a woman pursuing a youth), and the other in the Louvre (komes), are both decorated by Douris. Finally, a fragmentary cup-kotyle in Bologna (470: Pellegrini, *Vase delle Necropoli Etrusche*, p. 213) is placed by

Pellegrini in the school of Douris and is no doubt one of the artist's later works. I have not seen the neck-amphora (with double handles?) in the Stroganoff collection (*Compte Rendu*, 1874, Pl. 7, above), and do not add it to the list; but I think it very likely that Hartwig is right in connecting it with Douris (*Meisterschulen*, pp. 625-626, note).

The vases assignable to Douris thus number a hundred and five.

IV.

Pl. II, 2 gives the design on the interior of a fragmentary red-figured cup in the University Museum at Philadelphia. For the photograph, and for permission to publish it, I am indebted to Miss Edith Hall. The composition is much the same as in the larger, finer, and slightly later cup which has been assigned above to the Panaitios painter. The artist is the Colmar painter, so named after a cup in the Schongauer Museum (*Arch. Anz.* 1904, p. 53); a list of his works has been given elsewhere (*Vases in America*, pp. 81-82). Yellow lines for the inner marking of the body between chest and hip, but none on legs or arms: a brown line on the cup which the youth holds in his left hand: indicating the offset lip. The wreath on the krater black: the navel a black arc. On the reverse a symposium, with a reserved line below: one figure and part of another remain: the figure preserved is a youth playing at cottabos.

A cup by this painter in Harrow (number 6 in my list) has a similar subject on the interior, a naked youth running with a cup in his left hand and plunging his right hand, which is to be thought of as holding an oinochoe, into a calyx-krater which stands before him.

Pl. II, 3 is the internal design of a cup by the Colmar painter in the Hofmuseum at Vienna (number 8 in my list). The photograph, with permission to reproduce it, was kindly sent me some years ago by Dr. Julius Banks. The subject is a reclining youth playing at cottabos. The photograph fails to reproduce the brown inner marking below the breast, and the brown intermediate lines on the drapery, half-way between each pair of strongly curved black lines. On the side of the couch, in brown, $\text{HO}\Pi\text{A}\{\}$: a brown line on the cup held in the left hand. On the reverse, two silens and a maenad and two silens and a mule, with a reserved line below: $\text{HO}\Pi\text{A}\{\}$ over each scene, and the same, retrograde, in front of the youth's face on the obverse.

J. D. BEAZLEY.

QUEEN DYNAMIS OF BOSPORUS.¹

[PLATES III, IV.]

I.

IN 1898 there were discovered in the ruins of an ancient building (maybe a temple) near Novorossiysk several objects made of bronze (a candelabrum, the remnants of a tripod, the handle of a vessel, probably some consecrated plate), and together with them was found a woman's bust in bronze.

The style of the candelabrum reminds one closely of the candelabrum discovered in the vault of Mme. Zaitzeva in Kertch, and it dates consequently from the age of Augustus (see Rostovtzeff, *Ancient Decorative Painting in the South of Russia*, St. Petersburg, 1914, p. 207 f., Pl. LX.). The handle of a vessel, in all its details, is similar to handles of vessels found at Bori. The whole treasure found at Bori was published by E. M. Pridik (*Materials for the Archaeology of Russia*, No. 34), and it dates from about the beginning of the Christian era.

To the same time also belongs, as we shall see, the most interesting amongst the objects discovered at Novorossiysk: the bust of a woman (Pl. III.). This bust has a hollow rod affixed to it for the purpose of mounting the bust on a pedestal. Its height, the rod included, is 26 cm.; the length of the rod, 2 cm.; the width at the shoulders, 16 cm. The workmanship is excellent. The woman represented is not young. Her hair, waved in front and combed over the ears, is tied at the back in a long knot; from under this knot tightly curled locks fall on the shoulders to the right and left and down the back. The pupil and the iris are indicated by engraved lines. Small round earrings adorn the ears.

The most characteristic feature of the bust is its headgear, shaped like a Phrygian cap or *τιγάρα ὀρθή*. The tiara may have been made of leather, or felt, or metal. The whole surface of this headgear is covered with incrustated silver stars or suns, with eight rays to each. In the intervals four-leaved

¹ This article was first printed in Russian in the publication in honour of Countess P. S. Uvaroff, President of the Moscow Archaeological Society (Moscow, 1914). It is reprinted

here with considerable changes based upon new materials not available to me at the time of the first publication.

copper rosettes are incrustated, each leaf shaped like a heart. Apparently a diadem encircles the tiara and is tied up at the back by a wreath.

First of all, the bust undoubtedly represents a mortal woman and not a goddess: a broad, fleshy face, a round chin, tightly pressed lips, a large, straight nose, thin eyebrows, a fashionable coiffure show clearly that this is a portrait of an elderly woman, slightly idealised perhaps, but with a good general likeness and a strong individuality.

The time to which the bust belongs can be indicated quite accurately, leaving no place for doubt. Apart from the excellent, although somewhat heavy, workmanship, a definite indication is given by the fashion of the hairdressing. This hairdressing is characteristic of one period only, about the beginning of the Christian era: the epoch of Livia, Antonia, and both Agrippinas (senior and junior). These conditions admitted, and the suggested date being unquestionable, the headgear of the bust and its ornamentation acquire a special importance.

The headgear, ornamented with suns or stars (*πῖλος ἀστεπαῖτος*, as Julianus calls them, *Or.* v. 165 B, when indicating that Cybele made a present of it to Attis), is found on two series of monuments of the Hellenistic period.³⁰ The first series opens about the second century B.C. with the coins of Pessinus, on which the heads of Cybele and Attis are reproduced together, the latter with a leathern cap covered with stars and with the symbols of Cybele on the reverse (see Imhoof-Blumer, *Griech. Münzen*, 226 (750), 748 f., Taf. XIII. 7-9). To these are related undoubtedly all the later reproductions of Attis and men with the *πῖλος ἀστεπαῖτος* for headgear (see, in addition to the works indicated in the footnote, also Roscher, *Berichte der sächs. Ges.* 1894; *Phil. Hist. Kl.* vol. 43, especially Pl. I^a, 7 and 8). All these representations of Attis are to be distinguished by the usual stars reproduced on the cap of Attis with irregularly disposed rays, the number of which varies (from four to seven).

More instructive is the other series of monuments, more closely related to our bust. This series is strictly confined to the limits of the Pontus and the Pontus kingdom. It begins in a characteristic manner with the coins of Queen Amastris. The foundress of the city of Amastris on the Pontus, the daughter of Oxathrus, brother of Darius Codomannus, for a long time she ruled over Heraclea. On her coins and on the coins of the city of Amastris of her time (see Babelon-Reinach, *Rec. gén.* I. 135 f., Nos. 1-9, Pl. XVIII. 1-9) we find on the obverse the representation of the head of a youth wearing a leathern cap of the so-called Phrygian shape, with a laurel wreath

³⁰ Later monuments in comparatively large numbers are compared by Drexler, *Jahrb. für Phil.* 1894, 325 f.; compare the same in Roscher's *Lexicon*, II. 2, 2741, 2743; see also Smirnov, *The Phrygian Moon-god*, a publication in honour of I. V. Ponomarevsky, 197, 3; Hapding, *Atlas*, 129, 8. The typical shape of the stars or suns on our bust is not found on

them. A bust of the Moon-god or Attis, contemporary with our bust and reproduced on one of the Hildesheim silver vessels (see Pernice-Winter, *Der Hildesheimer Silberfund*, Berlin, 1901, Taf. V.), a pendant to the vessel with the bust of Cybele, has quite another kind of stars, differing in the technique of their workmanship.

I may remark, by the way, that the sun and the moon appear also on the coins of the successors of Mithradates, especially on the gold stater of Dynamis (Head, *Hist. Num.*² p. 504), a granddaughter of Mithradates (see Pl. IV. 4) and the sun alone on the coins of Polemon (see Pl. IV. 9), who for some time was the husband of Dynamis (Babelon-Reinach, *Rec.* i. 1, p. 19, Nos. 17 and 18, Pl. III. 7 and f. 1); and, lastly, the sun subjected to the zodiacal sign of the balance on the coins of Pythodoris (Babelon-Reinach, *ibid.*, p. 20, No. 20 *bis*, Pl. III. 10), and the sun combined with the moon on coins of the son of Dynamis—Mithradates VII. (see Pl. IV. 7).

If, at the same time, we take into consideration that the leathern helmet is a characteristic feature also of the above-mentioned second series of coins, i.e. the coins of Mithradates in his youth, and that on a number of coins of Amisus and Chabaeta, minted, as Imhoof supposes, also by Mithradates, he is represented wearing the helmet of Perseus, which reminds us in nearly all its details of the helmet on our bust (see Babelon-Reinach, i. 1, p. 55, No. 32, Pl. VII. 25, and No. 35, Pl. VIII. 27; p. 77, No. 1, Pl. XI. 21; Imhoof-Blumer, *Nam. Zeitschr.* 45 (1912), 180, Nos. 62-64, Taf. II. 19 and 20), it seems more than probable that the *τιάρα ὀρθή*, or the helmet in the shape of a tiara, of our bust indicates the sovereign status of the woman represented and the fact that she belonged to the dynasty of Pontus. I must point out also that the rosettes on the helmet may have been suggested by the rosettes of the wreaths encircling the reverse of the coins of Mithradates the Great.

Consequently our bust represents one of the women belonging to the royal family of Pontus, who lived about the time of the beginning of the Christian era—in no case earlier than that epoch, and not later than the epoch of Agrippina junior—and who stood in very close relation to the kingdom of Bosphorus and the territories belonging to it or considered as its dependencies.

All the above-mentioned considerations and hypotheses are most brilliantly confirmed by comparing all the monuments indicated above with the statues and reliefs of the two temples that were built by Antiochus III. of Commagene on the eastern and western terraces of his burial tumulus on Nemrud-Dag. This tumulus strikingly reminds us of the royal tumuli of the sovereigns of Bosphorus on both sides—the European and the Asiatic—of the Cimmerian Bosphorus³. I will not repeat here the exemplary commentary of Puchstein on the sculptures of these temples,⁴ of which unfortunately so little use has been made. I may remark only that the gods, especially the Persian gods Mithra and Auramazda, are represented always with the typical *τιάρα ὀρθή*, repeating in all its details the tiara of our bust, even the diadem encircling the lower part of it. The diadem of Auramazda (Taf. XXXIX. 1) is covered with reproductions of lightning, and the tiara

³ See more on this matter in my work, *Ancient Decorative Painting in the South of Russia*, St. Petersburg, 1914, p. 45 f.

⁴ See Humann and Puchstein, *Reisen in Kleinasien und Nordsyrien*, Berlin, 1893.

with stars or suns; the tiara of Mithra (Taf. XXXVIII. 2) has two diadems (at the bottom and in the middle), and is surrounded by sun-rays. It is characteristic that an exactly similar tiara, encircled by a diadem at the bottom and covered with circles and rhomboids, is worn by the great glorified Persian king, the ancestor of Antiochus, whose figure has been preserved so beautifully, quite beyond comparison with any other statues and reliefs in temples, on the relief reproduced in Taf. XXXVI. 1. Here also, as on our bust and on the relief of Auramazda, the tiara is covered with three rows of suns, typical also in the Commagene sculpture. The same suns adorn his boots and trousers, which are discernible under the ceremonial *chiton* in which he is clothed.⁷

It is characteristic that the suns adorning the *tiara apoth* of great gods and glorified Persian kings play a large part also in the costume of the Commagenian kings. The ornamentation with suns of the armour of Antiochus on a number of reliefs is quite typical (Taf. XXXVIII. 1, 2; XXXIX. 1, 2, etc.).⁸

I must remark also that the renowned zodiacal lion of Nemrud-Dag, covered with stars or suns, with a crescent under the neck (Taf. XL), serves, evidently, to explain the crest—a sun and a crescent—on the coins of Mithradates.⁹

After these comparisons there is no doubt left that our bust represents a queen who traced her origin from the Persian kings, i.e. who belonged at that time to the family of Mithradates, although, perhaps, the bust was not made during her life, but after her death, as seems to be indicated by the place where the bust was discovered and by the idealisation of the queen's features. It is indubitable, too, that the queen had actually ruled, and that she had ruled a long time and alone, considering herself, and being in fact, equal in her sovereign rights to any other king.

All these peculiarities have to be taken into consideration when the question is put: which queen of the family of Mithradates, having ruled over the Bosphorus, may be recognised in the features of our bust, which belongs to about the beginning of the Christian era?

There is not much choice in this case. But it is characteristic that *a priori* all the women out of whom we can choose could have been represented in a monument such as our bust. I am alluding to Dynamis,

⁷ See on this relief the excellent remarks of Puchstein (l. l., p. 299 f.); he speaks of the tiara on p. 300 f. Compare the tiara of Tigranes I. of Armenia, on the side of which a sun with eight rays is represented between two eagles: Percy Gardner, *The Seleucid Kings of Syria*, p. 103 f., and Babelon, *Les rois de Syrie*, p. 213 f., Pl. XXIX, 8 f.

⁸ In the collection of Seligsohn there are several dozens of gold pieces of divers dimensions and types with the same ornament in

relief; probably, they were worn upon a leatheren cuirass (see L. Pollak, *Klassisch-antike Goldschmied-arbeiten in Bräun A. I. von Nalidow*, Leipzig, 1903, Nos. 492, 493, 494, 499, Taf. XIX.). Similar small gold pieces or squares have been found in a number of burials of the first century A.D. in the south of Russia (see *Comptes-rendus de la Commission Impériale Arch.* 1888, Atlas, Pl. I, 3.).

⁹ See on this Puchstein l. l., p. 329 f.

the wife of Asandros, Scribonius, and Polemon I., daughter of Pharmaces and granddaughter of Mithradates, who, as I shall try to prove, ruled for a long time over the kingdom of Bosphorus, the whole of her much agitated life passed on the Bosphorus, also to Pythodoria, the wife of Polemon I., whose sojourn in the kingdom of Bosphorus figured as a short episode only in her life; to Gepaepyris, the wife of Aspurgoz, the stepmother, perhaps, of Mithradates II. (VII.), and in any case the mother of Kotys I., as I shall try to prove below; and, lastly, to Antonia Tryphaena, who came into touch with the Bosphorus through her only son, Polemon II. All these women were typical Hellenistic queens, energetic and powerful, all of them either ruled personally or actively collaborated with their husbands in ruling; or in some instances opposed their husbands and competed with them for sovereign power; therefore any of these women could have been immortalised by a bronze bust representing them with their queenly headgear. But, as we shall see further, the only one who during the whole of her life had been closely linked to the Bosphorus was Dynamis, and she alone had the blood of Mithradates flowing in her veins. Therefore, *a priori*, it seems quite possible that she, precisely, has been immortalised by the bust.

Apart from such *a priori* considerations, iconographic comparisons are also possible, because the portraits of all the above-mentioned women have been preserved up to our time on their coins.¹⁰

As far as I can see, the only one of the four queens whose features can be likened to the features of our bust is Dynamis. Unfortunately, the portrait on the unique coin of this queen (see Pl. IV. 4) that has been preserved for us is spoiled by a defect in striking precisely in the most characteristic feature, viz. the tip of the nose, but the fleshy, uplifted chin, the tightly pressed lips, the general shape of the nose, the forehead, and the eyes clearly coincide with the bust. I have remarked already that the features of the bust are rather idealised; the portrait on the coin is strictly realistic. Even more characteristic are the similar small round earrings and the four corkscrew-shaped, curled locks falling on the shoulders.

To the portrait on this coin and to the bronze bust are most closely linked the coins of Caesarea and Agrippia which were minted by Dynamis, as I shall try to prove below (see Pl. III. 5 and 6). The head represented on them has nothing in common with Livia, but the features are uncommonly like the features of the portrait on the gold coin of Dynamis and the features of the bronze bust with which we are concerned. The headgear is the typical one of the Scythian queen-priestesses. We easily recognise it

¹⁰ The coin of Dynamis has been published by Országhoff, *Outlook of Great Uvaroff's Collection*, Pl. II. 471; compare Minns, *Scythians and Greeks*, 392, fig. 247; the coins of Pythodoria, see Babelon-Reinach, *Rev.* t. I, 29, Nos. 19-21; compare further the literature concerning the life and rule of this queen; coins of Antonia Tryphaena, *l.c.* p. 21, Nos. 22-28 (see Pl. IV. 1); coins of Gepa-

pyris, Barmackoff, Pl. XXVI. Nos. 93, 94; Minns, *Scythians and Greeks*, Pl. VII. 7 (see Pl. IV. 10, 11) Kahstedt, *REs* x. (1910), p. 300 f., supposes that the head on the coin of Pythodoria is not the head of the queen herself, but the head of Livia, which is quite possible. The coin of Dynamis I reproduce from the unique specimen of Count Uvaroff's collection (see Pl. IV. 4).

by comparison with the objects discovered in the Scythian royal burials: see my article, 'The Hellenic-Scythian Headgear,' in the *Bulletin de la Commission Archéologique*, I, 63 (1917), 69 f.

The portraits of the other above-mentioned queens, in my opinion, have no resemblance whatever to our bust; it is characteristic that Tryphaena and Gepaepyris resemble one another very closely. However, to complete the picture, I consider it indispensable to give here a short description of what is known to us about the four above-named queens, as all the records of their lives in ancient documents and in the newest scientific literature as well, are obscure and very debatable, although in my opinion they may be grouped rationally and explained. This is especially the case as regards the lives of Dynamis and Gepaepyris, who alone have any reasonable claims to be considered as the originals of the bust.

II.

The history of the Bosphorus after the death of Mithradates is clear enough in its principal features, although very insufficiently indicated by some accidental notes in the works of Cassius Dio and Appian, by several inscriptions, and by a series of coins rather difficult to understand. The ideas of Mithradates continued to influence some of his successors, both the nearest and the more remote; his name still had authority among many of the tribes which had been ruled by him. His idea of creating a kingdom of Pontus based on the Graeco-Iranian culture, and on an army organised principally out of the comparatively civilised elements of the population of Cappadocia and Pontus, and the kingdom of Bosphorus as well, with all the adjoining more or less cultured tribes and peoples, was neither utopian nor unrealisable. The struggle of Parthia against Rome and her offensive in the epoch of the triumvirate, i.e. the repetition by the Parthians of the attempt of Mithradates, and the latter attempt as well, had disclosed the powerful forces secreted by the somewhat Hellenised Iranian elements who formed the ruling class of the population in the greater part of the great kingdom of Mithradates, and who played a pre-eminent political and cultural rôle in the life of non-Iranian Caucasus, Cappadocia, and Armenia. Having assumed to a great extent in the Hellenistic epoch, especially in the second century B.C., a Sarmatian appearance, the kingdom of Bosphorus prepared for political organisation a number of the nearest Sarmatian and Scythian tribes; a long-extended cultural influence exercised by the Greeks over the Scythians, first from Olbia, then from the Bosphorus and Chersonesus, made possible the continuation of the existence of the ancient Scythian power on a more civilised basis in Crimea, in the kingdom of Skiluros and Palakoa. To put a finishing touch to this ancient cultural work, to unite all the cultured parts of the Scythian and Sarmatian world, one thing only was needed: a strong personal will, a leader closely related in spirit and national feeling to all those elements which were ready for organised cultural life—an Iranian Alexander.

We must at last reject the old point of view that considered the Sarmatian tribes belonging to the feudal kingdom of Bosphorus, and the Scythians of the time of Skiluros and Palakos, as barbarians. The burial tumuli of Taman and of the greater part of the country on the river Kuban, of the later Hellenistic times, the poor remnants of the cities of Skiluros and Palakos, though very slightly explored, show clearly that the ruling classes of the population of these territories had outgrown the limits of barbarism and had learned how to create something personal, very original and very typical, in the region of material culture. There is no reason to wonder that reminiscences of the great past of Scythia and of the part played in the world's history by the Achaemenids of Persia had prepared for the Achaemenid Mithradates an unusually propitious ground in the political conceptions of those tribes and peoples, who undoubtedly had acquired simultaneously with a material culture the principles of a spiritual culture and some historical knowledge.

At the same time we have to keep in mind the close connexion between Pontus and Cappadocia and the northern shores of the Black Sea in general, and the localities near to the Sea of Azov and the Kuban particularly. This connexion began, as I shall try to prove in another place, in the age of Bronze and continued up to the epoch of the Roman domination (see *B.S.A.*, xxi. (1916-1917; 1917-1918)). It was based on a cultural as well as an ethnical relationship. One must remember that the great invasion of Asia Minor by the Scythians in the seventh century B.C. had left many traces. The Scythians undoubtedly settled down in Pontus, and this explains the presence of an Iranian element among the population of Pontus.

Mithradates was ruined, not by the Sarmatians or the Scythians, who had to form his last great army; but by the Greeks of Phamgoria, Chersonesus, Theodosia, and Panticapaeum, to whom at a certain time he had served as a rock of safety to cling to when they were on the point of being submerged by the Scythian and Sarmatian tidal wave. But, just as in Asia Minor, the Greeks in the Crimea very quickly understood that their relation to Rome was closer, and that Rome was more disposed to defend them against and shelter them from the invasion of an Hellenised Iran that threatened them, not in the military sense alone.

After the death of Mithradates the duality of forces acting in the kingdom influenced the whole history of the Bosphorus. The prevailing majority of the population, all the Sarmatian and Scythian tribes included in the kingdom, honoured the memory of Mithradates and were disposed to support his heirs, and the Greeks were ready to submit to any power that would guarantee them the preservation of their nationality and of the remnants of the municipal régime to which they were used.

Rome had to reckon with all those peculiarities of the Bosphorus and to keep up a constant watch, foreseeing the possible advent of a new unifier, a new Mithradates. The ruler of the Bosphorus had to be sufficiently popular to unify the diverse elements of the population; he had to support the Greek elements in their struggle with the local population, i.e. he had to be

an experienced politician and a gifted military leader, and at the same time he had to act as an obedient servant of Rome, showing no tendency to renew the schemes of Mithradates.

Therefore the choice of a ruler for the Bosphorus was a very difficult task, and the number of solutions of the question was nearly unlimited. The death of the last Paerisades did not necessarily bring to an end the whole royal house of the Spartocids, related to the royal families of many Scythian and Sarmatian tribes. This is testified unanimously by all the half-romantic, half-historical data concerning the Bosphorus of the later Hellenistic time—the tales told by Polyænus about Amaga and Turgatao, and the scraps of a legend about one of the latest Leukones reproduced by Ovid and his scholiast, and also the crumbs of historical knowledge which lie at the base of the moralising Scythian dialogues of Lucian, who undoubtedly was conversant with the Hellenistic literature concerning the Bosphorus.¹¹

Out of this agglomeration of Greeks and Sarmatians related to the Spartocids a pretender to the throne might always appear, and always could be found when required. At the same time, all the direct descendants of Mithradates, the chips from the old block of his numerous family, had a legal right to the throne.

The dynasty of the Polemonids, the successors of Mithradates the Great on the throne of Pontus, ranked also, of course, among the pretenders to the kingdom of Bosphorus. On their side was the ancient tradition closely linking together the cities of Pontus to the Greek cities on the Crimean shores.

Lastly, the ancient ethnical relationship, and in later times the tradition of Lysimachus, who at a certain epoch very strongly influenced the history of the kingdom of Bosphorus, also the continuous tendency of the Thracians to move their boundaries eastwards, converted even the Thracian vassals of Rome into pretenders to the throne of Bosphorus and to the inheritance of Mithradates on the northern shore of the Black Sea.

In the historical struggle for the throne of Bosphorus, no less than in the general history of the East at that time, a striking part was played by a number of eminent women with powerful connexions at the court of Rome, where such personal influences worked often in conjunction with political considerations, creating at times some rather odd combinations. Doubtless Pompey and Caesar, in later times Antonius and the Eastern plenipotentiaries of Augustus, Agrippa and Tiberius, and after them Germanicus, as plenipotentiary of Tiberius, not to mention the emperors themselves when they stayed in the East, were surrounded by Eastern dynasts with wives and mothers. The cunning Levantines were especially successful in influencing the women who often accompanied the political rulers of Rome, especially on their journeys to the charming East.

It is from these points of view only that it is possible to comprehend

¹¹ See my article, 'Amaga and Turgatao,' *Antiquities of Odessa*, v. xxxii. in the *Bulletin of the Society of History and*

the dynastical history of the Bosphorus of that dark and complex epoch. It must be kept in mind also, that even at that time Rome created new provinces and annexed Eastern kingdoms very unwillingly and only in cases of absolute necessity.

Dynamis, daughter of Pharnaces, was doubtless one of the most eminent women of that complex epoch. Her history reminds us to a great extent of the history of the clever, energetic, enduring, and ambitious women, wicked wives of many husbands, who appeared at the Hellenistic courts after Alexander.¹²

The date of her birth is unknown, as also the date of her marriage. No serious arguments can be found for or against the statement that it was she, precisely, who had been suggested by Pharnaces as a wife for Caesar in 47 B.C.¹³ Anyhow, about that time she became the wife of Asandros, who ought to have been then over sixty years of age (he died about 27 B.C. at the age of ninety-three);¹⁴ therefore, at the critical moment in her life, after the death of Asandros, Dynamis, in any case, was not a very young woman (probably between thirty and forty), as is indicated by her very realistic portrait on the above-mentioned stater, coined in 17-16 B.C.

We do not know whether she married Asandros before or after the death of Pharnaces. The one alternative is as possible as the other, but in any case at the time of her marriage she was only a tool in the hands of the politicians of that period.

The marriage with Dynamis was of the greatest importance to Asandros, as it linked him to Mithradates and guaranteed his support by the people

¹² All the ancient testimonies and the most important literature concerning the history of the Bosphorus after Mithradates have been collected, after Boeckh, by Latyshev in his introduction to his publication of inscriptions from the Bosphorus: see the latest, somewhat revised, edition of this introduction in Russian, Latyshev, *Нормы*, 93 f.; the newest Russian literature, unknown to Boeckh, the author of the articles, 'Bosphorus,' 'Chersonesus,' and 'Dynamis,' published in the *Encyclopaedia* of Pauly-Wissowa-Kroll, who gives the complete list of works on this subject published in Western countries, has been studied and made use of in its totality by E. H. Minns, *Scythians and Greeks*, p. 591 f. The article of Stein, 'Gepopyria,' in Pauly-Kroll, *B. E.*, must be added to his references, as also the excellent articles of Dessau in *Prosopographia imperii Romani*, and his article in *Eph. ep.* ix. 4, 691 f., *De regionibus Pythodoridis et de Pythodoridis juniore et Reges Thraciae qui fuerunt imperantibus Augusto*. Amongst the newest numismatic literature great importance is to be attached to the article of A. L. Berthier-Dégurgèle, 'On Coins of the Rulers of the Cimmerian Bosphorus, Identified by

Monograms,' *Bulletin of the Odessa Society of History and Antiquities*, v. xxix., wherein the whole series of gold coins of this period, as also a number of bronze coins, partly unpublished before, belonging to the epoch that concerns us, are well published for the first time, and the whole literature is reviewed very thoroughly. A number of important indications are added in the work of A. Orlovskii, *Excursions in the Region of Ancient Nymphaeum on the Shores of the Black Sea*, Moscow, 1914, *Numism. Collect.* iii., especially p. 29 f., 57 f., 62 f.

¹³ App. B. vi. ii, 91; compare von Sallet, *Beiträge zur Geschichte und Numismatik des Königs des cimmerischen Bosphorus und des Pontus*, Berlin, 1896, 6, footnote 8; more probable is the opinion emitted by Boeckh (*C.I.G.* ii. p. 94) and V. Voigt, *De Asandro, Bosphori rege*, Kiev, 1884, p. 3, that Asandros became son-in-law to Pharnaces (Dio. 54, 24) before the catastrophe of 47 B.C.

¹⁴ Luc. Macrob. 17; Voigt, l. l. 4. As the marriage of Dynamis was purely political, it is quite possible that at the time she was still in her childhood.

in the struggle with the Roman agent, who called himself Mithradates of Pergamon,¹⁰ and posed also as a descendant of Mithradates. The fact that Asandros considered his marriage as of very great importance to him is emphasised by an inscribed stele erected in Panticapaeum by Pantaleon, an admiral of Asandros, on the occasion, probably, of a great naval victory (*Inscr. Or. Sept. P.E.* ii. 25). The inscription runs thus: βασιλευόντος βασιλέως βασιλέων | μεγάλου Ἀσάνδρου [φιλο]ρωμαίου σωτήρος καὶ βασιλίσσης Δυνάμεως Πανταλέον ναύαρχος Ποσιδών Σωσινέ[ω]ς καὶ Ἀφροδίτη Ναυαρχίδι. The name of the queen, placed next to the king's name, indicates a sort of condominium. It is quite possible that Asandros retained his throne after the episode with Mithradates of Pergamon because Caesar, having then no time to devote to the far East, adjourned the regulation of the affairs of the Getae and the Parthians until the expedition, planned by him, into Parthia and against Boirebistas, and that later Asandros discovered a proper line of behaviour during the stormy period of the triumvirate, when possibly Dynamis became personally known to Augustus and Livia, whose support, as we shall see, she enjoyed afterwards.¹¹ A dark moment in her history was the episode of Scribonius, to whom she was married after the death of Asandros. Probably Dessau (*Eph. ep.* ix. 4. 694) is right in his supposition that Scribonius, posing as a grandson of Mithradates, was actually a provincial man, maybe of royal descent, who adopted a Roman name (*Dio.* 54. 24). It would be scarcely possible for Dynamis to accept for a husband an utter stranger, a Roman without any right to the throne. But Scribonius was not successful, after the death of Asandros, as the coin of Dynamis indicates, she reigned as queen, while Scribonius was quickly removed by the Bosporans themselves, perhaps by Bosporan Greeks, to ward off the danger of a new quarrel with Rome.¹²

After the episode of Scribonius, with the object evidently of preventing similar attempts in the future, Dynamis was married to Polemon—i.e. the Bosporan kingdom was reunited to Pontus, of which Polemon was the king.¹³ The condominium of Polemon and Dynamis continued for a very short time. It must be kept in mind that Polemon was murdered in 8 B.C., and that between 14 and 8 B.C. he had time to contract a second marriage with Pythodoris, and to get three children by her.¹⁴ If we allow four years only for the procreation of those three children, then his marriage to Pythodoris—i.e. the removal of Dynamis—ought to have taken place in the years 13–12 B.C.; therefore his cohabitation with Dynamis could not have lasted more than one year.

¹⁰ Strabo xiii. 4. 3, c. 625; *H. Alex.* 26 and 78; *Dio.* 42. 48.

¹¹ See my article, 'Caesar and the South of Russia,' *J.R.S.* vol. xii.

¹² I find no contradiction between the statements of *Dio.* 44.1 and pseudo-Lucian II.1) (compare Vögtl, *AA.* 75) it was quite possible that Asandros' army partly deserted

to Scribonius, as pseudo-Lucian affirms, as it doubtless consisted to a considerable extent of Scythians and Scythians; later it was not they who removed Scribonius, but the Greeks from Panticapaeum; see *Dio.* 54. 24. 3.

¹³ *Dio.* 54. 24. 6.

¹⁴ Strabo xii. 3. 29, c. 556.

Polemon's marriage to Pythodoris led nearly all the learned commentators who studied the events in which we are interested to suppose that Dynamis died in 13 or 12 B.C.²⁰ Nevertheless, we must remember that no mention of it is made in any ancient record, and that many data and the whole run of events on the Bosphorus testify to the contrary. Let us disentangle these data.

Apart from literary works, the name of Dynamis appears also on a number of inscriptions. In two of them she figures as the person consecrating statues to Augustus—one in Phanagoria, another in Panticapaeum; in one of the inscriptions she figures as the person consecrating a statue to Livia in the temple of Aphrodite. See *I. O. S. P. E.* ii. 354: αὐτοκράτορα Καίσαρα θεοῦ υἱὸν | Σεβαστὸν τὸν [π]άσης γῆς καὶ | [π]άσης θαλάσσης ἀρχόντα | τὸν ἑαυτῆς σωτήρα καὶ εὐεργέτην | βασιλίσσα Δύναμις φιλορώμαιος (Phanagoria); *I. O. S. P. E.* iv. 201: αὐτοκράτορα Καίσαρα θεὸν | [θ]εοῦ υἱὸν Σεβαστὸν τὸν ἑαυτῆς | [σ]ωτήρα καὶ εὐεργέτην | [β]ασιλίσσα Δύναμις φιλορώμαιος (Panticapaeum); iv. 420: Λιού[α] | τὴν τοῦ Σεβαστοῦ γυναῖκα | [β]ασιλίσσα Δύναμις φιλορώμαιος | τὴν ἑαυτῆς εὐεργέτην.

And the people of Phanagoria erect a statue to her; see *I. O. S. P. E.* ii. 356: Βασιλίσσαν Δύναμις φιλορώμαιον | τὴν ἐκ βασιλέως μεγάλου Φαίρακον | τοῦ ἐκ βασιλέως βασιλέων Μιθραδάτου Εὐπάτορος [Διο]- νύσε[υ] | τὴν ἑαυτῶν σῶταραν καὶ εὐεργέτην | ὁ δῆμος [ὁ Ἀγριππ]έων.

When were these inscriptions set up and what was their object? Clearly the first three inscriptions testify to some great act of bounty to Dynamis on the part of Augustus and Livia, and the fourth testifies to an act of bounty by Dynamis to Phanagoria. In both cases they allude to salvation from some very great and serious danger. The fourth inscription alone can be dated approximately. It is clear that the stele with this inscription could not have been erected before the intervention of Agrippa in the affairs of the Bosphorus. The adoption alone by the city of the name of Agrippa indicates that this intervention was considered by the citizens as a great benefit to the city. And if the alluring suggestion of Orieschnikoff is to be accepted: that simultaneously with the adoption by Phanagoria of the name of Agrippa, some other city, probably Panticapaeum, adopted the name of Caesarea—as seems to be indicated by two series of copper coins, one with the inscription Ἀγριππέων and the other with the inscription Καίσαρ έων—it should be evident that such a change of names was closely linked to some event connected with the whole kingdom of Bosphorus.²¹

Orieschnikoff²² quite rightly connects the copper coins bearing these inscriptions with the series of gold staters bearing heads of Augustus and Agrippa stamped on them and the monograms X or X. And this series, beginning only in 8 B.C., goes on up to 7 A.D. Therefore the changing of the

²⁰ The only exception is Minus, *Sophiana and Greek*, 594, 1 and 601, who suggests the same construction, taken broadly, as I do, although as to details we differ in a number of points.

²¹ See A. Orieschnikoff, *Excursions into the Region of Ancient Numismatics on the Shores of the Black Sea*, 4. Coins of Caesarea and Agrippia, p. 37 f.

²² A. Orieschnikoff, *l.c.* 40.

names of the cities was connected with the event which occasioned the appearance of the above-mentioned series of coins with the monogram Σ in the year 8 B.C.²²

The fourth of the above-quoted inscriptions fully agrees with all this. It cannot belong to the time of the personal reign of Dynamis in 17-16 B.C. At that time Phanagoria could not yet have been renamed 'Agrippia.' Neither can it belong to the year of condominium of Polemon and Dynamis. There is no allusion to Polemon in the inscription. Dynamis appears as sole ruler; she alone figures as the saviour and benefactress of the city, but not Dynamis and Polemon together, and the city emphasises her legal right to the throne, insisting on the fact that she is the daughter of Pharnaces and the granddaughter of Mithradates. All this is absolutely irreconcilable with the suggestion that the inscription belongs to the year of the condominium of Polemon and Dynamis. Polemon's masterful personality would never have allowed such a belittling of his prerogatives. It is clear that the inscription belongs, first, to the time of the personal reign of Dynamis; secondly, to the time after 17-16 B.C.; and thirdly, not to the epoch of the condominium of Polemon and Dynamis, but most probably to the time even after 8 A.C. This alone shows clearly that Dynamis did not die in the year of the marriage of Polemon with Pythodoris, but continued to live and came to reign again as sole personal ruler of the whole Bosphorus.

And precisely between 8 B.C. and 7 A.D. the series of coins is issued on which, beside the heads of Augustus and Agrippa, the *de facto* dispensers of life to the Bosphorus, appears the humble monogram Σ , most naturally deciphered, as Mommsen had pointed out already, into $\Delta \Upsilon \Lambda \text{M}$, the letters Δ , Υ , Λ , M , and even Σ being indisputably present and in themselves giving more than sufficient material for a monogram of the name $\Delta \Upsilon \Lambda \mu \epsilon$.²³

²² In addition to the statements of Orishnikoff, I may say that both the above-mentioned series of coins (the gold ones with heads of Augustus and Agrippa, and the copper ones with the names Caesaris and Agrippia) coincide with the above-quoted series of inscriptions also in that on the obverse of the coins of Agrippia and Caesaris a woman's head is represented in the headgear of a goddess, but with features which are generally likened to the features of Livia. I cannot refrain from stating that I, personally, am reminded by this head with a diadem, on the coins of Agrippa, not of the features of Livia, with whom, to tell the truth, it has very little in common, but of the head of Dynamis herself on her coin, and of the features of our bust. Therefore I am disposed to suggest that the Agrippians and Caesarians ornamented their coins with the head of their queen, adorned with the consecrated headgear of the chief priestess of the principal goddess of Phanagoria and Pontica-

paeum. Possibly Dynamis coined the copper money of the state simultaneously with this municipal coinage. In my article, 'The Copper Coinage of Dynamis and Asperges' (*Bulletin of the Scientific Research Commission of Tauris*, 54 (1918)), I tried to prove that this copper was represented by the coins with the monogram BAE ; see on this A. L. Berthier-Delagarde, *Bulletin of the Odessa Society of History and Antiquities*, xxix, (1915), and Orishnikoff, *Nomisma Collect.* iii, (1914).

²³ See these coins in the above-mentioned article of A. L. Berthier-Delagarde, *Bulletin of the Odessa Society of History and Antiquities*, xxix, p. 111 f.; Nos. 35-43 and Pls. II, III; Mommsen, *Monet. d. Rom. Imper.* 702, foot-note; A. von Sallet, *Beiträge*, etc., 69 f.; but their historical explanation of the coins is unacceptable; compare Brandis, P. W., *R. E.* s.v. Dynamis, wherein the latest works of Mommsen are indicated, especially *Epä.* v, 272.

These facts alone are sufficient to prove beyond dispute not only that Dynamis did not die in the years 13-12 B.C., but that, on the contrary, she arranged matters so as to be recognised as sole sovereign of the Bosphorus. The first three inscriptions quoted above accord fully with all this. They are explained generally as expressions of the gratitude of Dynamis to Augustus and Livia for her marriage to Polemon. I consider this to be quite impossible, first, because, as I have stated already, there is no reference whatever in the inscriptions to Polemon, and Dynamis figures as the sole queen of the Bosphorus; secondly, because Augustus and Livia, at that time, could not have saved Dynamis from anybody or anything; and thirdly, because there happened to be no reason for Dynamis to be thankful: she was the rightful queen of the Bosphorus, and Augustus together with Agrippa only lessened the scope of her legal rights by placing her under the tutelage of the powerful king of Pontus, who was not inclined to consider himself as only a nominal sovereign of the Bosphorus, but immediately installed himself on the Bosphorus as master and ruler.²⁵

On the other side, her installation as the autonomous and sole sovereign of the Bosphorus constituted a real bounty to Dynamis; it proved her salvation too, if the conditions are considered under which it was made effectual. These conditions, of which we possess some short records, are in perfect harmony with all the above-mentioned facts.

Strabo mentions Polemon's death twice and speaks of the position on the Bosphorus after it occurred. In Book xi. 2, 11 (c. 495) he mentions the Aspurgians, a new tribe, of whom Artemidoros of Ephesus, the source from whom Strabo takes his facts, knows nothing, having enumerated the Maeotian tribes. Strabo sets apart the Aspurgians as a new people with whom the information which he possessed connected an interesting historical record, saying as follows: *τούτοις δ' εἰσὶ καὶ οἱ Ἀσπουργιανοὶ μετὰ τὴν Φαναγορείαν οἰκοῦντες καὶ Γοργυπίας ἐν πεντακοσίοις σταδίοις, οὗ ἐπιβήμενος Πολέμων ὁ βασιλεὺς ἐπὶ προσποιήσει φίλιας οὐ λαθὼν ἀντισημασμένης καὶ ζωγρίας λαθραίας ἀπέθανε*. Compare xii. 3, 29, where Strabo is speaking of Pythodoris: *ἔστι δὲ θυγάτηρ Πυθόδωρου τοῦ Τραλλιανοῦ, γυνὴ δ' ἔμελλετο Πολέμονος καὶ συνεβασίλευσεν ἐκείνῳ χρόνον τινα, εἴτα διεδέξατο τὴν ἀρχὴν τελευτήσαντος ἐν τοῖς Ἀσπουργιανοῖς καλουμένοις τῶν περὶ τὴν Σινδικὴν βασιλείαν*.

This 'new' tribe, the Aspurgians, mentioned later in inscriptions belonging to the third century of the Christian era (*I. O. S. P. E.* ii. 29, 430,

²⁵ Quite possibly, even, the opposition with which Polemon was met on the Bosphorus when he appeared there (Dio, 24, 24) may have been turned to Dynamis as its source, and only a direct order from Augustus forced her to make a temporary peace with Polemon and grant him her hand. Augustus and considered that marriage as the sole and unique guarantee of peace on the Bos-

porus. The great significance attached by Augustus to the Bosphorus troubles is indicated by the number of honours awarded to Agrippa (Dio, l.c.) for arranging affairs on the Bosphorus. This shows that Scribonius was not a simple adventurer and that his marriage to Dynamis was considered as a serious danger to Rome, as a threat of a renewal of the epoch of Mithradatism.

481) was probably, as I have indicated already in another place²⁸ (compare Latysheff, *История*, 103), not a tribe, but the troop of armed followers of King Aspurgos,²⁹ brought by him from the shores of the Sea of Azov, or from the depths of Sarmatia, who helped him to conquer a throne for himself, and who, therefore, were domiciled by him on the richest lands on the Taman, between Gorgippia and Phanagorea, as his trustworthy supporters and bodyguard. This tribe, therefore, is a geographical *nomos*, the advent of which on the Taman was explained in the source used by Strabo (probably Hypsicrates),³⁰ the description having been incorporated into the above-quoted sentences by Strabo.

Aspurgos undoubtedly ruled the Bosphorus, as is proved by his inscriptions (*I. O. S. P. E.* ii. 36 and 364); his coins, dated, like the coins of Dynamis, according to the era of Pontus, are marked from 10 A.D. by his monogram $\Sigma\Gamma$, and from 13 A.D. by the same monogram with the addition of the title *Βασιλεύς*: (to the monogram $\Sigma\Gamma$ is added the letter β); this continues up to 35 A.D. Chronological sequence shows that he was the successor of Dynamis (concerning the interval in 8 and 9 A.D. see below). I think that he succeeded her as her fourth legal husband. The marriage of Dynamis and Aspurgos was probably made easier by the fact that Dynamis herself had Sarmatian blood in her veins. It is quite probable that her mother, the wife of Pharnaces, was a Sarmatian woman from the tribe of Syrakes or the tribe of Aorsi. As is known, those tribes supported

²⁸ *Bulletin of the Imper. Archæol. Commission*, 10, p. 13. Concerning the Aspurgians, see the remarks of N. Marr; of the Petrograd Academy, published in the Russian version of this article. As shown by those remarks, the region of life of the tribe, probably Sarmatian, to which the Aspurgians belonged was purely Iranian. Aspurgos, probably related by birth to the tribe including the Aspurgians, was followed in his advance into the country of the Bosphorus by his young tribesmen, who formed the troop of his bodyguards. Domiciled in the country of the Siml and Kurkotai, evidently as landowners, and at the same time as bodyguards of the king (they played the same part later also), they assumed the name of 'Aspurgians', i.e. sons of Aspurgos, corresponding to the 'sons of boyards' in Russia, and they gave their name to the country occupied by them, as shown by Strabo and the comparisons made by Marr.

²⁹ What was the link binding Aspurgos to the tribe to which the Aspurgians belonged? This link or bond, demonstrated by the support rendered by the Sarmatian tribes to Aspurgos and his son Mithradates VII., may be most easily explained by the supposition that Aspurgos was a Sarmatian king, the

head of the tribe, whose support Dynamis bought by marrying him. Such a supposition seems to be contradicted by an inscription in honour of Aspurgos, wherein he is described as the son of Amandros. Usually Amandros is identified with Amandros (see *I. O. S. P. E.* ii. 36). Such an alteration of a name in an official inscription appears to me very strange indeed, and I am quite disposed, with Kiewling (*P. W. R.*, *R.E.* vii. 1625), to consider Amandros as a Sarmatian king, who had nothing in common with Amandros. If this is true, then the reason is plausible why the descendants of Aspurgos occupying the throne of the Bosphorus were so fond of giving their sons the name of Sarmatians. They treasured the memory of their Sarmatian descent. It is, of course, however, possible that Aspurgos was a son of Amandros and Dynamis. The alteration in the name of Amandros may then be explained by the supposition that Amandros was not a Greek, but a Sarmatian, and that his Sarmatian name was Gracinos. I cannot consider such an alternative as very convincing.

³⁰ See my article, 'Strabo as a Source for the History of the Bosphorus,' in the collection of articles issued in honour of B. P. Duzenit, Kharkoff, 1914.

Pharnaces (see Strabo xi. 5; 8 c 506; App. *Mithr.* 120). Aspurgos, quite probably, was also one of the lesser kings of the same tribes—a relation perhaps of Dynamis. Such a relationship, as I have already indicated above, was quite common on the Bosphorus in the later Hellenistic times. The last Spartocids undoubtedly were not Greeks, but half Iranian, half Maeotic.

In view of all this, I suppose the events to have taken the following course. When Polemon married Pythodoris, Dynamis sought shelter, as Mithradates VII did later, with one of the neighbouring Sarmatian tribes, at the head of which stood Aspurgos. The hope of conquering the Bosphorus, and perhaps bonds of relationship, prompted Aspurgos to marry Dynamis and to give her his energetic support. It is possible, even, that the measures planned by Augustus and Agrippa to quiet troubles on the Bosphorus by means of the marriage of Polemon and Dynamis proved unsuccessful, and that misunderstandings between Dynamis and Polemon started in the very first days, leading to a revolt against Polemon, organised by Dynamis, with the help of Aspurgos, in the Asiatic part of the kingdom. This forced Polemon to begin, immediately after his accession to the throne of the Bosphorus, a number of military expeditions against the revolted tribes, which led, *inter alia*, to the capture of Colchis and the destruction of Tanais—that city having probably taken the side of his wife and Aspurgos (see Strabo xi. 2, 3 (c 493) and 2, 18 (c 499)), and having refused to submit. Nevertheless Dynamis and Aspurgos held on amongst the tribes on the shores of the Sea of Azov, and Polemon did not succeed in reducing them by force of arms. He tried then to conquer by cunning, maybe precisely at the time when the troops of Aspurgos had already captured the whole of Sindica, but was caught in his own trap and was murdered. This episode went on from the 13th to the 8th year B.C., with intervals of course. Such an order of events explains quite naturally the marriage of Polemon and Pythodoris.

The critical moment for Dynamis arrived when Polemon was murdered and Augustus had to decide definitely the fate of the Bosphorus. Probably, not uninfluenced by Livia, and principally because force was on the side of Aspurgos and Dynamis, influenced also by a promise from Dynamis of total submission, Augustus decided in her favour. Her rights to the throne were recognised as against the rights of Pythodoris, who, with three small children on her hands, could not effectively guarantee the maintenance of the tranquillity so much required on the Bosphorus. But the autonomy of the kingdom had to come to an end. The head of Dynamis and her full title do not appear on the coins any more; a humble monogram alone testifies to the fact that, although in the name of Augustus, Dynamis is still ruling over the Bosphorus.²⁰ Under such conditions it is comprehensible that Dynamis had to feel, or to pretend to feel, thankful to Augustus and Livia, and was obliged to emphasise constantly that she was *φιλοπρόμαχος*. It is quite comprehensible also that Phanagoria, threatened with the same

²⁰ It is characteristic that in this monogram no mention is made of the regal title of Dynamis.

fate as Tanais, glorified its saviour, Dynamis, and honoured her by erecting a statue with a glowing inscription, not forgetting to mention that she was φιλορώματος, i.e. simply a vassal of Rome in spite of her descent from Mithradates. It is comprehensible that Dynamis felt obliged to rename two of the cities of her kingdom, changing their names into Caesarea and Agrippia, in honour of Augustus and the late ruler of the East, who at that time was already dead.⁵⁶ Simultaneously begins the cult of the Roman emperors on the Bosphorus, as is testified by the *Καίσαρειον* of Phanagoria.⁵⁷ Consequently, I take it as proved that, after the death of Polemon, Dynamis was appointed by Augustus to rule over the Bosphorus, and that with the help of her fourth husband she succeeded in removing Polemon, who strove to become the *de facto* master on the Bosphorus. Dynamis ruled up to 7 A.D., when she died at the advanced age of about seventy years. Her closest collaborator evidently was her husband Aspurgos. Somewhat similar was the position about the same time of Pythodoris, who ruled conjointly with her son, although her son remained ἰδιώτης (Strabo xii. 3, 29, c 556), but without the royal title.

Such, in my opinion, is the history of Dynamis. It is comprehensible that during her long life she should have acquired a great popularity in her kingdom and that her portrait may have been kept in a temple or in some public building, not only within the closer limits of the kingdom proper, but also in a seashore city, like Bata (Novorossijsk), which recognised her rule.

III.

In addition to this short history of Dynamis, I have now to record the fate of the dynasty related to her.

After the death of Dynamis, Aspurgos was not recognised at once as king and ruler of the Bosphorus. The direct successor of Dynamis was a person indicated by the monogram $\pi\tau$ on gold coins. The identity of

⁵⁶ As, undoubtedly, the types of Bosphoric coins at that time were specified, if not in Rome, then in any case by the representative of Roman power in the East, the new names of cities, and the types of coins as well, had to emphasise the fact of the vassalage of the Bosphorus to Rome. My reconstruction of events and my explanation of their meaning also explain the reason why the head of Agrippa appeared on the Bosphoric coins together with the head of Augustus, and why Phanagoria was renamed. It must be kept in mind that at that time Agrippa was already dead. All these honours, therefore, served only to immortalise his memory, which is confirmed by the type of the head, represented without any insignia. Augustus may have placed Agrippa very high in his esteem, but it is a great question whether he would

have allowed the head of Agrippa to appear, while Agrippa was still living, on a whole series of coins together with the head of Augustus. Now, after Agrippa's death such reverence on the part of Augustus towards such a man of genius as his late collaborator, who had worked so hard for the welfare of the East, was quite comprehensible. It is true that during the life of Agrippa coins were minted in Rome with his portrait, as an honour granted to him by Augustus, but this is far from equal in meaning with the fact of coins being minted by a vassal kingdom in the names of Augustus and Agrippa and the simultaneous adoption of the names of Augustus and Agrippa by two principal cities of that kingdom.

⁵⁷ I.O.S.P.E. n. 362.

this person is a matter of conjecture only. I suppose that most probably, after the death of Dynamis, the influence of Pythodoris prevailed again; and the king $\Sigma\Gamma$ may have been one of the sons of Polemon, the same, perhaps, who later on ruled conjointly with Pythodoris and whose name remains unknown to us (the other son, Zenon, according to Tacitus, *Ann.* ii. 56, was made king of Armenia in 18 A.D.).

Evidently once more the history of Polemon repeated itself. Aspurgos succeeded in affirming his rights, and from 10 A.D. his monogram appears on coins. In 13 A.D. he receives the royal title, and during the rule of Tiberius he begins to mint coins with his own portrait on the reverse, and with the head of Tiberius first, and then that of Gaius, on the obverse.²²

As we know, Aspurgos had two sons: the elder was Mithradates, and the younger Kotys.²³ Both names are interesting; the first indicates the relationship of Aspurgos to the Achaemenids, while the second suggests some link with the ruling house of Thrace.

Those links require an explanation. Mithradates VII., the elder son of Aspurgos, insists especially on his relationship with the Achaemenids and Dynamis (see his coin with his head as sun-god and the sun and the moon on the reverse as on the coins of Dynamis, Pl. IV. 7, comp. 4). After his death this tradition is nearly forgotten, but during the reign of his younger brother Kotys and his successors the Thracian tradition gathers great strength, and along with it the Sarmatian tradition mentioned and explained above is insisted upon. The Thracian tradition is indicated by Thracian names of most of the kings, and by the fact that the kings traced their genealogy up to the progenitors of the Thracian royal house, Poseidon and Heracles (through Eumolpus).²⁴ The Achaemenid tendencies of Mithradates can be explained only by the influence of Dynamis. If Aspurgos was actually the husband of Dynamis and not her son begotten from Asandros, then it must be admitted that Mithradates VII. was the son of Dynamis and Aspurgos, and inherited the Achaemenid blood of his mother. His portraits (see Pl. IV. 8, 10) show that when Aspurgos died he was a grown-up man; it may be quite possible therefore, that he was born about the year 10 B.C., when, as it is to be supposed, Dynamis and Aspurgos were living together.²⁵

In 30 A.D. Mithradates was a grown-up, perhaps even an elderly, man, while his brother Kotys at that time was still an infant. His name was

²² See Berthoulet-Belagarde, *II.*, p. 112 f., Nos. 46-67, Pls. III, IV.

²³ Tac. *Ann.* xii. 18; Latyshev, *Borisk.* 118; *Bullet. of the Imp. Arch. Commission*, 37, p. 70, No. 7; Minns, *Scythians and Greeks*, 306 f.

²⁴ See Latyshev, *Borisk.* 113, footnote 1.

²⁵ There is one argument only adverse to this suggestion: the age of his supposed mother. It must be supposed that in 14-13 B.C. he could not have been younger than forty.

Ivo. I do not consider this argument to be conclusive. A second adverse argument may be found in the fact that the above-mentioned emblems of Heracles and Poseidon appeared also on the coins of Mithradates, but this can be explained by the influence of Gephyria, a Thracian woman. It has to be kept in mind also that Heracles played a part in the mythology of the Taurian peninsula, and Poseidon was always greatly honoured in the seaside cities of the kingdom of Bosphorus.

Thracian; all his connexions were Thracian, too. Whence did that come? The male line of the dynasty of Asandros and Mithradates did not include any Thracian elements. There remains the female line; the mother of Kotys was undoubtedly Gepaepyris; Kotys has honoured her memory and the memory of Aspurgos, his father, by reproducing on one of his coins the portrait of the king, and on another the portrait of the queen (see Fig. 1).²⁶ The queen's portrait is the same as was represented on the coins of Gepaepyris.²⁷ Beside the portrait of his father Kotys places his usual monogram; therefore the monogram placed next to the portrait of his mother has to be accepted as the monogram of Gepaepyris. Precisely the same monogram succeeds to the monogram of Aspurgos on the gold coins. It must be deciphered, therefore, as *Βα(σιλίσσης) Γηπακύνως*, or *Βασιδίσσα) Γηπακύνως*, and the monogram, just as in the case of the monogram of Dynamis, contains nearly all the letters of her name.²⁸ Consequently it appears that Gepaepyris was the wife of Aspurgos and the mother of Kotys; also that she was a Thracian²⁹ and belonged to a royal house. This explains why she could have inherited the power of Aspurgos to rule alone in the beginning, and later to rule conjointly with Mithradates, the elder son of Aspurgos.



FIG. 1.—COIN STRUCK BY KOTYS IN HONOUR OF THE MEMORY OF GEPAEPYRIS.

If the pretensions of the Polemonids to the throne of Bosphorus are to be taken into account, it may be supposed that the position of Aspurgos, as occupier of the throne of Bosphorus, was strengthened after the liquidation of the struggle for this throne between the Asandrids and the Polemonids by means of a marriage of Aspurgos to a princess of Polemon's dynasty. It is known that this dynasty, in the person of Antonia Tryphaena, had already been linked before with the Thracian royal dynasty. The marriage of Aspurgos took place most probably after he was awarded the royal title, i.e. after 13 A.D., but could have been made the condition of a previous agreement.

²⁶ See the very reliable remarks of Berthier-Delagarde, *l.c.*, p. 47 f., Fig. on p. 48, and Pl. II., Nos. 30-31.

²⁷ This similarity, as far as I remember, has never been duly appreciated, although the coin of Kotys, without the slightest doubt, is a literal reproduction of the coin of his mother (see Pl. IV., 11).

²⁸ The same solution of the question is

given by Mura, *Scythians and Greeks*, 601.

²⁹ See Tomaschok, *Die alten Thraker*, 61; the same name appears in an inscription from Thracian Heraclea, in the epoch of Hadrian, as the name of a lady belonging to a distinguished municipal family; see *I. gr. et c. R.*, p. I, 783; Stein, P. W., *B.E.* vii, 1927 f.; Mura, *l.c.*, 604.

If so, Gēpaēpyris may quite easily have been a daughter of Tryphaena and her husband, whose name was also Kotys. Tryphaena was born not later than between 11 and 8 B.C.: she married very young evidently, for in 19 A.D., when Kotys, her husband, died, she was already the mother of four, or perhaps of five, children, if Gēpaēpyris is to be taken into account; one of these children, Polemon II., was appointed king of the Bosphorus in 38 A.D. Consequently, about 20 A.D. or perhaps a little later, one of her daughters might have attained the age of fifteen or sixteen.

In the face of all the considerations stated above, I would suggest, with all reserve, that Gēpaēpyris was one of the daughters of Kotys and Antonia Tryphaena. It is true that tradition does not mention Gēpaēpyris as one of the children of Kotys, but it did not mention Pythodoris junior either as the daughter of Kotys and Antonia, until quite lately she was so successfully discovered by Dessau.⁴⁰ It was quite natural for the royal wife of Aspurgos to succeed to her husband after his death. In 36 and 37 A.D. gold staters were minted bearing the monogram which we have recognised above as undoubtedly a monogram of her name. But Caligula and the Senate did not consider a woman's rule as sufficient guarantee of order, and Polemon II., the brother of Gēpaēpyris,⁴¹ as I suppose, was appointed king of the Bosphorus.

Anyhow, Gēpaēpyris and Mithradates did not concede their rights to Polemon, but it was Mithradates who at that time played the leading part, having, evidently, found strong supporters amongst the Sarmatians and Maeotians, to whom he was closely related through both his father and his mother. From 39 A.D. he begins to issue coins with his own name instead of the monogram of Gēpaēpyris, and with the head of Caligula stamped upon them.

The struggle between Polemon and Mithradates was settled in 41 A.D. by Claudius, who, after compensating Polemon, definitely awarded the Bosphorus to Mithradates and his stepmother Gēpaēpyris. But since that time Mithradates had to rule conjointly with Gēpaēpyris, as is indicated by the coins with the names and portraits of both of them, although Mithradates was still trying to play the first part, as some coins indicate with his name alone stamped upon them. Gēpaēpyris also tried to mint her own coins.⁴² But Mithradates had turned away absolutely from the

⁴⁰ Dessau, *Epikr.* ix. 4, 101 L. If an accidental coincidence does not delude me, I am quite inclined to see a certain likeness between Antonia Tryphaena and Gēpaēpyris, as represented by their portraits (see Pl. IV. 1 and II).

⁴¹ On Polemon II. and his fate after his removal from the Bosphorus, see Dymshaitch, *Namism. Collection*, part I. (the Cilician coins of the king M. Antonius Polemon).

⁴² The conclusions of Kahrstedt's work, 'Fragen und antiken Münzen,' in *Klio*, x. (1910), 261 f., agree completely with this re-

construction and explanation of the coins of Mithradates and Gēpaēpyris. The whole history of Hellenistic coins with the portraits of queens shows that the queens minted coins with their own portraits either as autonomous sovereigns (Dynamis, for instance, Kahrstedt, *LL*, 261 f.), as guardians of their sons, or as conjoint rulers. Kahrstedt is right in supposing that the coins of Gēpaēpyris belong to the latter category (*LL*, 263). The coins of Dynamis, acting as guardian, of her husband Aspurgos are also quite in the Hellenistic tradition.

tradition of a vassal Bosphorus. He was dreaming of the creation of an autonomous kingdom, independent of Rome. On such a basis, quite possibly misunderstandings sprung up between him and his stepmother, leading to the journey of Kotys, sent by his mother, to Rome, where Kotys played the traitor to his brother, and, supported by Roman troops, overpowered and removed Mithradates, after having recognised Roman supremacy himself and having totally submitted to Rome. The minting by Kotys of coins in honour of Gepaepeyris proves that she had taken his side.⁴¹ She perished evidently during the struggle with Mithradates.

In such wise, I suppose, we may reconstruct the history of the epoch after the death of Dynamis, and such a reconstruction explains all the later history of Bosphorus, where the Achaemenid character of the royal power was so greatly influenced by Thracian and local Sarmatian traditions, as also by the traditions of Dynamis, Aspurgos, and Gepaepeyris.

This complex, composite character of the royal power on the Bosphorus was clearly realised by the kings themselves. Apart from the already-mentioned coins of Sauromates II. and Rhescuporis II., on which the king is represented with the attributes of Poseidon and Heracles, the Thracian sympathies of the kings are emphasised also by the reproduction of a series of labours of Heracles on coins of Sauromates II., especially those with the figure of the king on a galloping horse, beginning with Kotys I. (see concerning all this the *Bulletin of the Imperial Arch. Commission*, 49, p. 22 f., and Pl. IV.). Soon, however, a strong Sarmatian tendency becomes admixed with this, showing itself also in the names of kings. Of that tendency I have spoken in detail in another place (*Bulletin of the Imperial Arch. Commission*, 49, p. 1 f.). That tendency becomes stronger and stronger in consequence of the growing Sarmatisation of the whole population of the kingdom of Bosphorus. And the Achaemenid character is emphasised at last by the proud title of the kings—*Βασιλεὺς Βασιλέων*.

All these facts, which it would be out of place to describe here in greater detail, are for the first time thoroughly explained by the suggested reconstruction of the history of the kingdom of Bosphorus in the period of transition, this by itself being a proof, and not a slight one, of the correctness of the above-stated considerations.

As to our special object, it is important to note that none of the women who ruled over Bosphorus in the first century of the Christian era could pretend to be a descendant of Mithradates except Dynamis. Therefore she alone has the right to claim for her own the bust which has served as the starting point of this study of the fate of Bosphorus in the first half of the first century of our era.

M. ROSTOVITZKY.

⁴¹ Compare Petrus Patr. Fr. Aist. gr. ix, p. 185, fr. 3; Latyshev, *Восток*, 108, 2. The history of the revolt of Mithradates is told by Tacitus, *Ann.* iii. 15 f.; compare Dio,

60, 8; Plin. *N.H.* 5, 17. It is characteristic that a last shelter and support were found by Mithradates amongst the Sarmatians, as was the case with Dynamis in her time.

A GREEK CARNIVAL.

IN the discussion of Greek dramatic origins, a curious passage of Apuleius¹ has never, so far as I know, been mentioned.

In the second book of the *Metamorphoses* the hero Lucius describes a feast given at Hypata in Thessaly by his rich relative Byrrhena. After the feast Byrrhena informs him that an annual festival, coeval with the city, will be celebrated next day—a joyous ceremony, unique in the world, in honour of the god Laughter. She wishes that he could invent some humorous freak for the occasion. Lucius promises to do his best. Being very drunk, he then bids Byrrhena good-night and departs with his slave for the house of Milo, his miserly old host. A gust blows out their torch, and they get home with difficulty, arm in arm. There they find three large and lusty persons violently battering the door. Lucius has been² warned by his mistress Milo's slave Fotis, against certain young Mohawks of the town—'uosam factio nobilissimorum iuuenum'—who think nothing of murdering rich strangers. He at once draws his sword, and one by one stabs all three. Fotis, roused by the noise, lets him in and he quickly falls asleep.

On waking next morning he is filled with alarm, but his meditations are cut short by the arrival of the magistrates, with an enormous crowd. Two lictors are ordered to arrest him, and he is solemnly led round the town, followed by the crowd, which is convulsed with laughter. At last he is brought before the tribunal in the forum. The crowd, however, insists on an adjournment to the theatre, where Lucius is placed in the orchestra, and tried for murder.

The three bodies, covered with a cloth, lie on a bier beside him. An elderly man, the chief night-watchman, who had witnessed the brawl, makes a speech for the prosecution. Lucius delivers an impassioned reply, full of vivid details of the fight, but the crowd only laughs the more. Two women then appear, one old and ragged, the other in black, carrying a baby: both wave olive-branches. They lament over the bier, and plead fervently for vengeance on the murderer. The senior magistrate then rises and addresses the people. Lucius, he says, has confessed his guilt, and must be severely punished, but first he must be compelled by torture to reveal his accomplices. The instruments of torture are produced, but

at this point the old woman begs the citizens to have the corpses uncovered. The magistrates concur and decide that Lucius must do this with his own hand, and he is forced by the lictors to pull off the cloth. The three bodies prove to be three goat-skin wine-bottles, stabbed through and through by Lucius' sword.

The crowd now bursts into uncontrolled agonies of laughter, and slowly leaves the theatre. Lucius stands dumb with shame, but is at last led home by Milo. The magistrates,² in full state, immediately enter the house. They compliment Lucius on his noble birth, and beg him not to take the matter as a personal insult. They explain that a similar performance takes place every year in honour of the god Laughter, and assure him that this god will always befriend him henceforth. They add that the state '*pro ista gratia*' has voted him great honours: they have appointed him *patronus*, and have decreed the erection of his statue in bronze. Lucius declines these honours with thanks, affecting an amiability which he does not feel. After refusing an invitation to dine again with Byrrhena, he takes the first opportunity of stinking to bed.

Potis then enters with every mark of distress, and confesses herself the cause of all his woes. She explains that her mistress Pamphile (Milo's wife, and a notorious witch) had sent her to the barber's, to collect the hair of a blonde young Boeotian, of whom she was enamoured. The barber had caught her, and in despair she had brought home instead the yellow clippings of certain goat-skin wine-bottles. Pamphile had performed incantations, with the result that the skins had been magically drawn to the house,³ where Lucius had met and stabbed them.

Such is the outline of the story. It clearly falls into two parts. The story of the witch and the wine-skins is complete in itself—one of the many short Boccaccian tales incorporated in the *Metamorphoses*. Anatole France has so retold it in a famous scene of *L'Île des Pingouins*. The mock-trial is less easily classified.

It is true that the two stories have been carefully dovetailed. The author was faced with an obvious difficulty. How could this witch story be made the basis of a public joke, without involving the witch? Two inventions solved the problem—the darkness and the watchman. Drink or love might drive any of us to stab a wine-skin on a starless night. Did not Touchstone, when he was in love, break his sword upon a stone, and bid him take that for coming anight to Jane Smile?

Yet the connection is plainly artificial. Lucius' fight takes place late at night⁴—'*ferè iam tertiam vigilia*' says the watchman—and he is arrested⁵ early next morning. The whole mock-trial scheme must therefore have been improvised at a moment's notice. So far as it goes, this rapid improvisation confirms the theory (put forward in this paper) that the mock-trial was an easy adaptation of a immemorial ritual. It seems likely,

¹ 'Cum suis instigulibus,' *ibid.* 11.

mentioned in *Don Quixote*, part I. ch. 35.

² Corvatus perhaps had this incident in

⁴ *ibid.* 3.

⁵ *ibid.* 1.

however, that, in an earlier version of Lucius' narrative, the fight with the wine-skins had nothing to do with Pamphile's witchcraft, but was a trap deliberately laid for Lucius by the young bloods of Hypata—'uesana factio nobilissimorum iuuenum'—aided and abetted by Byrrhena. The present narrative has many touches suggestive of Byrrhena's complicity, especially in the passage describing her attempt to get Lucius to dine with her after the trial.⁷ 'Et ecce quidam intro currens famulus: "rogat te," ait "tua parens Byrrhena et coniuii, cui te sero despondemus, iam adpropinquantis admonet." ad haec ego formidans et procul perhorrescens etiam ipsam domum eius: "quam uellem," inquam, "parens, iussis tuis obsequium commodare, si per fidem liceret id facere. hospes enim meus Milon per hodierni diei praesentissimum numen adiurans effecit, ut eius hodiernae cenas pignerarer, nec ipse discedit nec me digredi patitur. prohibere epulare uadimonium differamus." Attempts have been made to emend Lucius' opening words, but the whole speech would seem to come from an earlier version, in which Byrrhena herself was present. There is moreover no trace in the present narrative of this previous invitation, though Lucius does not dispute it. Both changes suggest a deliberate effacement of Byrrhena's rôle, and this impression is confirmed by Lucius' 'dread and deep horror of her very house'—feelings which the present story hardly justifies.

The author's purpose in so recasting the story is not far to seek. By implicating Fotis in Lucius' humiliation, he gives a plausible motive for her reluctant⁸ confession of her mistress' sorceries—a confession which quickly leads to Lucius' momentous experiment in the Black Art.

In any case, it is clear that the story of the mock-trial may be separately examined. The following points are important.

First, this festival of Laughter, peculiar to Hypata, was annual.⁹ 'Sollemnis dies,' says Byrrhena, 'a primis conuantiis huius urbis conditus crastinus aduenit, quo die soli mortaliū sanctissimum deum Risum hilare atque gaudiali ritu propitiāmus.' Secondly, some sort of *lusus*, comparable to the mock-trial, always took place, though its form varied.¹⁰ 'Utinam aliquid,' says Byrrhena, 'de proprio lepore laetificum honorando deo communicarē, quo magis pleniusque tanto numini litemus.' 'Bene, et fiet ut iubes,' says Lucius (speaking truer than he knew) 'et uellem hercules materiem repperire aliquam quam deus tantus affluenter¹¹ indueret.'¹² 'Nam lusus iste,' say the magistrates, 'quum publice gratissimo deo Risi per annus reuerticula sollemniter celebramus, semper commenti nouitate florescit.'

These passages might be taken (and were perhaps meant) to imply that the only permanent feature of the festival was some sort of public and enormous joke: a mock-trial to-day, but something quite different in other

⁷ iii. 12. ⁸ iii. 15. ⁹ ii. 31. ¹⁰ *ib.*

¹¹ So F. Haupt reads 'imbueret,' but Apuleius is fond of 'indue' in the sense of 'adapting' a strange form: cf. ii. 22 'ueral-

pelles . . . mascae induunt,' iii. 23 'cum simul anem . . . induerō.' Its use with 'materiem' is, however, difficult.

¹² iii. 11.

years. Nevertheless the narrative has features which suggest the presence of more permanent elements.

First, the series of incidents forms a complete ritual drama of the Carnival type. We have first a fight, with the killing of one set of adversaries; then a public lamentation over the dead bodies; then the sudden revelation that the victims are not dead; and lastly the bestowal of honours on the victor. It is almost the exact sequence postulated¹² by Gilbert Murray for the hypothetical "Eniautos" celebrations¹³ from which he believed that Tragedy developed—*Agon, Pathos, Messenger, Threnos, Anagnorisis, and Theophany*.¹⁴ Moreover the *Pathos* takes place off the stage, and is only announced to the audience, and the bodies are brought in on a bier.

I do not wish, however, to press this correspondence, or to suggest that I accept Gilbert Murray's theory of the origin of Greek tragedy.

The fight and the deaths would normally, no doubt, be part of the show. Siam deaths on the stage seem to be common enough in Carnival fights. But in this case they had inevitably to take place off the stage and before the show; otherwise the exploitation of Lucius' brawl would have been impossible. The public might well consent to forgo the fun of the stage fight for the sake of an April fool who honestly thought himself a murderer.

The honours voted to Lucius are not in themselves extraordinary, but the language with which they are introduced emphasizes the religious character of the performance. The magistrates' words are worth quoting:¹⁵ 'Iste deus auctorem et¹⁶ ~~ac~~-torem suum propitius ubique comitabitur amanter nec unquam patietur, ut ex animo doleas, sed frontem tuam serena uenustate laetabit adsidue. at tibi ciuitas omnis pro ista gratia honores egregios obtulit, nam et patronum scripsit, et ut in aere stet imago tua decreuit.'

The absence of any¹⁷ sexual element, such as a ritual marriage, is noticeable; but Lucius as a public butt was manifestly done with from the moment he saw the murdered wine-skins (though Byrrhena may well have plotted a mock-marriage for him, at that feast which he so wisely eschews). The crowd can scarcely have found much difficulty in improvising that side of the show.

Further, the leading of Lucius round the town has a thoroughly ritual character, as Apuleius twice indicates.¹⁷ 'Tandem pererratis plateis omnibus et in modum eorum quibus lastralibus piametis minas portentorum hostiis circumforaneis explant circumductus angulatim forum cuiusque tribunal adstitit . . . tunc ne per proscaenium medium uelut quandam victimam publica ministeria producant et orchestrae mediae sistunt.' It could not be

¹² *Thesis* by J. E. Harrison, 1912, p. 34 ff.

¹³ *ibid.* 11.

¹⁴ F has 'auctorem & | torem suum' ('& torem' crossed out by a later hand); & has 'auctorem & tatorum'; 'auctorum' (read by Halm) is due to Vollgraf.

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¹⁵ Lucius' orgy with Fotis after her recapture (iii. 20) is obviously a private affair, but it crowns with amusing propriety his (say's) religious adventure.

¹⁷ *ibid.* 2.

more plainly stated that Lucius is treated exactly like a *pharmakos*¹⁸: it will be remembered, for instance, that at Marseilles the *pharmakos*¹⁹ circumdabatur per totam civitatem: and the shadow of crucifixion²⁰ was over Lucius' head.

Who was the 'dens Risus' in whose honour this festival is said to have been held? Byrrhena remarks that the Hypatines honour him 'soli mortalium.' There is little evidence for this cult, though²¹ Γέλως appears occasionally as a member of Dionysus' *thiasos*. Plutarch, however, twice mentions the cult at Sparta, associating it, after Sosibius, with Lyncurgus, ἀλλὰ καὶ τὸ τοῦ Γέλωτος ἀγαλμῆτιόν ἐκείνον ἰδρύσασθαι Σωσίβιος ἱστορεῖ (*Lycurg.* 25. 4) ἔστι δὲ Λακεδαιμονίους οὐ φόβου μόνον ἀλλὰ καὶ θανάτου καὶ γέλωτος καὶ ταιστέων ἄλλων παθημάτων ἱερὰ (*Cleom.* 9. 1). Both passages suggest a local and unimportant shrine. The Risus of Hypata²² 'hodierni diei praesentissimum numen' seems to be Carnival personified, Puck mocking the brief usurpers of Olympus.

The season of the festival is not clearly indicated by Apuleius, but it is certainly either spring or summer, for roses²³ are in bloom. The coming of winter, after a world of adventures, is described in the ninth book,²⁴ and the very first coming of the following spring²⁵—'nec in ipso ortu'—is associated with the reappearance of roses. It is at the spring festival of Isis²⁶ that Lucius eats the roses that restore his human shape. The magistrates' phrase²⁷ 'per annua reuerticula' is not unsuitable to the vernal equinox, and spring is perhaps the likeliest season for Lucius' journey to Thessaly.

Of recorded ancient festivals²⁸ the Hilaria (as Beroaldus remarked) is that most readily suggested by Apuleius' description. This festival took place on March 25th (reckoned the vernal equinox) and is associated by Macrobius, Julian, Damascius and others with the worship of Attis and Cybele. It was an uproarious carnival²⁹—'Hilaribus quibus omnia festa et fieri debere scimus et dici'—and included³⁰ free masquerading in every kind of disguise.

Though the performance described by Apuleius has clearly no direct connexion with Attis, it may easily have taken place at the Hilaria. Native mimimeries must have flourished beside imported ritual. Apuleius³¹ himself describes the masquerading revellers who accompanied the vernal procession of Isis at Corinth, in language which recalls Herodian's. He clearly distinguishes these revellers from the worshippers proper: 'pompaē magnae . . .

¹⁸ To some extent Lucius doubles the rôle of victor and victim. He has to be in the limelight, and it is obvious that the Hypatines did not take their ritual very seriously.

¹⁹ Petron. ap. Serv. ad Verg. *Aen.* iii. 78.

²⁰ *ibid.* 9.

²¹ Philostr. *Imag.* i. 23, and *on tamen*.

²² *ibid.* 12. ²³ *ibid.* 16, iii. 27-28.

²⁴ *ibid.* 32. ²⁵ *ibid.* x. 29. ²⁶ *ibid.* xi. 14.

²⁷ *ibid.* 14. Cf. *Florida* 18, 'soli annus reuertenda.'

²⁸ Cf. Frazer, *Adonis, Attis, and Osiris*, ed. 3, vol. 1, p. 273; also Clemens, G. 'Der Ursprung des Karnevals' in *Archiv für Religionswissenschaft*, xvii. 1-2, pp. 139-168.

²⁹ *Vopisc. Aetel.* i. 1.

³⁰ Herodian, i. x. 6-7.

³¹ *ibid.* 8.

praecedunt anteludia': they are 'oblectationes ludicae popularium' distinct from the 'peculiaris pompa' of the 'sospitatrix dea'. Apuleius' championship of Isis against Cybele would perhaps suffice to explain the absence of any reference to the Phrygian deities at the Hypatine festival.

It is not necessary to suppose the mock-trial² an original part of the festival; it may have compensated on this occasion for the loss of the normal fight, somewhat as the trial-scene in the *Acharnians* takes the place of the regular Agon of Comedy.

It seems fair, however, to conclude that the whole story is based on a real spring festival, which Apuleius (or his Greek model) may themselves have witnessed: and that this festival included (1) the leading of a Pharmakos round the town; (2) a sham-fight in which one adversary was killed; (3) a lamentation; (4) the revelation that the victim was not dead, and (5) the public bestowal of honours on the victor, or on the revived victim.

The spirit of the narrative and the name of the God suggest that the festival had become a supple carnival of fun, 'semper commenti novitate florens'. It is the more surprising that the traditional features are so plainly preserved.

D. S. ROBERTSON.

² It may be observed that certain features of the trial-scene, though explained by the story, are oddly reminiscent of the Thracian

Carnival described by Dawkins in *J.H.S.* xxvi. 1906, p. 119: the old woman in rags, the baby, the policeman, and the goustakins.

NOTES ON THE IMPERIAL PERSIAN COINAGE.

[PLATE V.]

THE rulers of the Persian Empire, during whose reigns the Persian Imperial coinage was issued, were the following¹ :—

	B.C.
Darius I., s. of Hystaspes	521-486
Xerxes I., s. of Darius I.	486-465
Artaxerxes I. Makrocheir, s. of Xerxes I.	465-425
Xerxes II., s. of Artaxerxes I.	425
Ochus = Darius II., Nothos, s. of Artaxerxes I.	424-405
Arsakas = Artaxerxes II. Mnemon, s. of Darius II.	405-359
Cyrus the Younger, s. of Darius II.	401
Ochus = Artaxerxes III., s. of Artaxerxes II.	359-338
Arses, s. of Artaxerxes III.	338-337
Kodomanos = Darius III., s. of Arsaces, s. of Artabates or Ostanes, s. of Darius II.	337-330

The Persian Imperial coinage² consisted of gold coins, generally known to the Greeks as *Darics* (*Δαρικαὶ στατήρæ*), with smaller denominations, and silver coins, generally known as *sigloi* (*σίγλοι, σίκλοι, σίκλα*, the same word as Hebrew *shekel*), which also had smaller denominations. The word *Δαρικός* was sometimes also used by the Greeks of the silver coins³. The Persian name for the gold coins is not known⁴, there can be little doubt that the word *Δαρικός* is "a pure Greek formation from the Greek form of the Persian name *Dariyavocush*; just as "fanciful" is a pure English formation from the English form "fancy" of the Greek *φαντασία*"⁵.

¹ References to recent authorities in Babalon, *Revue*, n. II. 44. See also the genealogical tree in Pauly-Wissowa, *R.E.* i. 4. 6. "Achumeniden."

² The Plate accompanying this article represents a few of the more important varieties to which reference is made, enlarged to twice their actual size.

³ Cf. *Plut. Cim.* 3.

⁴ It has long been known that there was a

word *darika* used in contracts of the reigns of Nabonidus and the false Smerdis, before the reign of Darius I., as in the phrase "he gave in payment two talents of dry dates and a *darika*." The meaning of the word, however, remains quite uncertain, and it is not clear that it is the same as the word of a weight, as Babalon (*Revue*, n. II. p. 30) now maintains.

⁵ *Hill, Hist. Greek Coins*, p. 27.

The probability is that the daric was introduced by Darius I⁸; no specimens that have survived appear, so far as one can judge by style and fabric, to be earlier than his reign.

The metrology of the daric and siglos has been subjected to an exhaustive analysis by Regling,⁹ which makes it unnecessary to go into details here. He comes to the conclusion that the normal weight of the daric is 8.4 grm. (120.7 grm.),¹⁰ although single specimens are known of various higher weights from 8.41 grm. (129.8 grm.) to 8.83 grm. (136.3 grm.). The average weight is 8.354 grm. (128.9 grm.). The supposed half-daric does not exist as a denomination¹¹, but two specimens of the $\frac{1}{2}$ daric survive, one in the British Museum weighing 0.69 grm., and one weighing 0.71 grm. at Berlin,¹² as well as a single specimen of $\frac{1}{4}$ of a daric, weighing 0.155 grm.¹³ It is difficult to know what purpose these small denominations can have served, except as makeweights when it was desired to make up the value of under-weighted darics.

The specific gravity of seven of the darics in the British Museum has recently been ascertained by the Rev. J. W. Hankin.¹⁴ The average is 18.96. If the alloy is pure silver, the average fineness of these darics is 0.981, as opposed to 0.991 for Croesean staters also ascertained from the examination of seven specimens.

The normal weight of the siglos, again according to Regling's exhaustive demonstration, is 5.6 grm. (86.4 grm.); the highest recorded weight is 5.88 grm. (90.7 grm.); the average 5.38 grm. (83.1 grm.). A table of frequency shows the mass of the coins concentrated between 5.26 and 5.60 grm. As smaller denominations Regling gives thirds, fourths (the point of distinction between these two denominations is difficult), sixths and one specimen of a twelfth.¹⁵ He reckons the curious little piece of 3.58 grm. illustrated in Pl. V, No. 5, and indeed other even lighter specimens as full sigloi; but the last piece in his list (British Museum, from Cunningham, 2.98 grm.) proves on examination to be nothing more than an electrotyle, though an admirably made one. Mr. Newell has a specimen weighing 4.00 grm., which, he says, shows no signs of being plated or cast. The coins of very low weight may, as suggested to me by Mr. Allan, be of Indian origin; certainly

⁸ Herodotus (c. 106); Harpocration, s.v. *Sapientis* (cp. Schol. Aristoph. *Ecol.* 602) says that it was named after some older king.

⁹ *Klio*, xiv. 1914, pp. 91 ff., with full tables of revised weights.

¹⁰ Borrell (*Num. Chr.* vi. 1843, p. 153) reports that the average weight of 123 gold darics from the Canal Fund was 129.4 grm., and that darics found in Asia Minor are always lighter, however well preserved, by from 2 to 2½ grm., than the lightest of those in the Canal Fund.

¹¹ *Klio*, l.c. p. 106.

¹² *Zf.N.* xxiv. 1904, p. 87, Taf. iv. 5.

¹³ *Ibid.* Taf. iv. 6. Obs. Head of King, r.; bearded; rev. *INAN*.

¹⁴ *Num. Chr.* 1916, p. 238.

¹⁵ Macdonald, *Hunterian Catalogue*, iii. p. 354, No. 4; obs. King with bow and sword, rev. head of a satrap; therefore not a normal Imperial coin. Sir Hermann Weber possessed a quarter-siglos of 1.29 grm. (18.6 grm.) similar to one in the British Museum weighing 1.10 grm. To Regling's list of sixths, add that in the Prose Coll. (*Byper Katalog* xlvi. 2678, Taf. xlii. 0.71 grm.) which is of Type I. (King with spear).

the coin figured in Pl. V. No. 5, came from Cunningham's collection, and is of very peculiar (though not, so far as I can see, of specially Indian) style.

The gold daric, as is well known,¹⁴ was rated at 20 sigloi, the ratio between gold and silver being as 133 to 1.

It is perhaps necessary to say a word here of certain names of coins which, it has been thought, have some connexion with the Persian system. The Elephantine papyri reveal to us the existence in Egypt in the fifth century of a system of reckoning by which

1 kerešh	= 10 shekels,
1 shekel	= 4 d(rachmae ?),
1 d(rachma ?)	= 10 hallarin. ¹⁵

Kerešh is the old Persian *karsha*. The word *hallur* (𐎧𐎠𐎺) seems to correspond to the Assyrian *khalluru*.¹⁶ Clermont Ganneau ingeniously interprets the system as based on a shekel-tetradrachm of the Attic standard, and this may well be right, although the premiss on which he bases his argument is apparently unsound.¹⁷ It is very doubtful whether the *hallur* was an actual coin, and not merely a money of account; but it would be a convenient unit, since $\frac{1}{16}$ of an Attic tetradrachm was roughly equivalent to $\frac{1}{2}$ of a tetradrachm of the 'Babylonian' standard and to $\frac{1}{16}$ of a tetradrachm of the 'Phoenician' standard, and many coins of those systems must have circulated in Egypt.

Δανάκη or *δανάκης* is the Greek form of the old Persian *dānaka*, and is described by late Greek writers (Hesychius and *Etym. Magn.*) as νομισματίον τι βαρβαρικόν, δυνάμενον πλέον ὀβολού.¹⁸ Whether it was a denomination of the Imperial Persian currency may be doubted. But there are small coins, such as the $\frac{1}{4}$ shekel struck at Sidon (about 0.89 grm. or 13.8 grm.) and the Aradlian 'obol' (about the same weight) which were fairly plentiful in Phoenicia, and would fit the description.¹⁹ The *ἡμιδανάκιον* which is recorded would, on this theory, be represented by an actual Sidonian coin.

The classification of the Achaemenid coinage, in spite of one or two gallant attempts at solution,²⁰ remains almost where it was in the days when Lenormant²¹ vaguely recognised that there were different profiles to be

¹⁴ Regling, *loc. cit.* p. 109.

¹⁵ See especially A. H. Sayce and A. R. Cowley, *Aramaic Papyri discovered at Assuan* (1906), pp. 22-23; Clermont Ganneau, *Revue d'Arch. Orient.* vi. pp. 133 ff.

¹⁶ *P.S.B.A.* xxv. (1903), p. 206. What precisely *khalluru* means, however, whether it is a small denomination of weight or coin, seems to me not to be quite made out.

¹⁷ The Hebrew shekel which Josephus (*Ant. Jud.* iii. 8.5) equates to four Attic drachms is the Tyrian shekel of his time which the Romans tariffed at four denarii (see Hultsch, *Metz. Script.*, Index, s.v. σίκλος, 3).

¹⁸ Hultsch, in Pauly-Wissowa, *R.E.* iv. 2,

2002-3.

¹⁹ *B.M.C.* 'Phoenicia,' p. xii.

²⁰ See especially Babelon: *Les Peres Achéménides* (1893), pp. xi-xviii; 'L'iconographie et ses origines dans les types monétaires grecs' (*Rev. num.* 1908, and *Mélanges Numismatiques* iv. pp. 254-269); *Traité des Monnaies grecques et romaines*, Part II. L (1907), 287-64; ii. (1910), 37-71. J. P. Six was for a time working at the problem, and communicated his views to Babelon (*Peres Achém.* p. xiii. n.) and Head (letters in 1891).

²¹ *Traité de Numism.*, *Revue grecque*, p. 123 (1840), quoted by Babelon, *Peres Achém.* p. xiii.

distinguished in the heads of the kings. Barclay Head²¹ was content in 1877 to say of the darics (and the same must apply to the sigloi) that 'some are archaic, and date from the time of Darius and Xerxes, while others are characterized by more careful work, and these belong to the later monarchs of the Achaemenian dynasty,' and to describe Lenormant's attempt as a 'refinement of classification.' Thirty-four years later²² he recognised that there were successive modifications in the physiognomy of the king which suggest rude attempts at portraiture; notably the beardless head, presumably of Cyrus the Younger (Pl. V, No. 3). The latest pronouncement on the subject²³ goes back to Head's position in 1877 and rejects Babelon's identification of the beardless king as Cyrus on various grounds.²⁴

That there are various modifications, which enable us to divide the darics and sigloi into groups, is clear; but how far these are to be regarded as 'successive,' and how far they are merely due to local differences of workmanship is another question. It must be remembered also that the dating of other Persian works of art, such as seals, by their 'portraiture' alone is no more secure than the dating of the coins. Had we a dated series of seals, or of other objects with representations of the kings, it might be possible to obtain some evidence for the dating of the coins; although even then it would be necessary to remember that the traditions in one art are not always the same as in another.

The darics and sigloi fall into four very distinct series, according as the Great King is represented as:—

- I. Carrying strung bow in l., spear in r. (Pl. V, Nos. 1-6).
- II. Carrying strung bow in l., dagger in r. (Pl. V, Nos. 7, 10, 11).
- III. Shooting with the bow. (Pl. V, No. 12).
- IV. In half-figure, holding strung bow in l., two arrows in r. (Pl. V, No. 13).

²¹ *Coinage of Lydia and Persia* (1877), p. 28.

²² *Hist. Num.* p. 828.

²³ P. Gardner, *Hist. of Ancient Coinage* (1918), p. 10.

²⁴ These are: (1) Several of the Persian kings came to the throne young. [But none of them was so closely in touch with the Greeks, and therefore so likely to depart from the conventional bearded type; and the little mask of Pan on the reverse of the coin in question is purely Greek in style.] (2) 'The extreme rarity of the coin is a strong reason against supposing that it was issued by Cyrus, who must have used gold coins in great quantities to pay his Greek mercenaries, who received a daric or more a month.' [But there is no reason to suppose that Cyrus wanted more coins for his Greek mercenaries than other Persian kings for their vast armies. The rarity of ancient coins is also too much a

matter of chance to serve as an argument.] (3) 'The weight of the example in Paris (8.46 grm., 130.5 grm.) seems to point to the period of Alexander the Great.' [The darics, on the contrary, which are shown by the style of their reverses (see below) to belong to the end of the Persian period, are not distinguished by high weights; and Regling (*Kön.* xiv, p. 104) finds the average of the double darics (which everybody admits to be of the time of Alexander the Great) to be 16.59 grm., which yields a daric of 8.30 grm., or less than the ordinary Persian daric. A table of frequency (intervals of 0.05 grm.) constructed from Regling's list shows the highest point (11 specimens out of 48) between 16.65 and 16.61 grm., which would place the normal weight a trifle higher than the average. The weight of the Paris specimen is, if anything, in favour of a pre-Alexandrine date.]

Within the first two series the following groups may be distinguished. I give Babelon's attribution in square brackets after each.

Series I.—

- A. The King's figure is slight, his head inclined a little forward [Darius I.]
See Pl. V, No. 1.
- B. Kidaris usually low; beard more flowing [Xerxes].
(The distinction between A and B is often very difficult).
- C. Coarse features, nose large, beard shaggy [Artaxerxes I.].
- C^{bis}. Similar to C, but more definitely barbarous, or connected by reverse dies with barbarous obverses.
- D. Slim figure with straight nose [Darius II.].
- E. Eye in profile, nose short, cheek full, beard long, V-shaped fold in front of kandys [Artaxerxes II.]. See Plate V, No. 2.
- F. Beardless; kidaris without points(?); kandys of rough material [Cyrus the Younger]; mask of bearded and horned Pan, incuse, at side of incuse of reverse. See Plate V, No. 3, where a *negative* reproduction of the reverse is illustrated, so as to show the head of Pan in relief.
- G. Short figure, large head, square beard, straight nose.
- H. Short, squat figure, curls at side of beard; nose usually upline; V-shaped fold in front of kandys; fabric of coins usually small and circular. See Pl. V, No. 4.
- H^{bis}. Ends of hair curling; comparatively short beard; fabric of coin neat and circular. See Pl. V, No. 5.
- K. High relief; straight nose; long beard. Reverse pattern of wavy lines approximating to that of Babylonian double-darics. See Pl. V, No. 6, and compare the reverse with that of No. 14, a double daric.

Series II.—

- A. Body without indication of waist.
(a) With symbols on reverse. See Pl. V, Nos. 7-9.
(b) Without symbols on reverse.
- B. Generally similar to A (b) but with pellets indicating ornament on undersides of sleeves of kandys.
- C. Barbarous in style.
- D. Coarse style; waist indicated; large nose; exergual line, where shown, is dotted [Arses]. See Pl. V, No. 10.
- E. Neat style; three or four annulets on breast of kandys; exergual line plain; fabric of silver resembling Series I. H or Series III. [Arses and Darius III.]. See Pl. V, No. 11.

Series III. and IV. [both given to Artaxerxes III. by Babelon] seem to allow of no division into groups.

The last two series are much rarer than the others, and differ from them in fabric, being as a rule round, instead of oblong in shape, and of much neater

workmanship. I have noticed among these no instance of barbarous style, and only two cases of punch-marking, and these punch-marks are placed on the edges instead of on the faces of the coins. The style of the coins of Series III. seems to be characteristically Persian, and there can be no probability that they were made in the portions of the Empire amenable to Greek influences. There is one group (*H*) among the coins of Series I. which approaches Series III. in neatness and roundness of fabric, and the same is true of Group *K* in Series II. Darics corresponding to Group *H* of Series I. are very scarce,²⁰ and the Series III. and IV. consist entirely of silver, with the exception of the tiny gold-coin from the Montagu Collection (now in the British Museum) and its fellow at Berlin. Possibly this rarity of the gold pieces points to their having been issued in a different part of the Empire from the others.

In addition to the four ordinary series of Persian Imperial coins there exists a single gold coin²¹ with an obverse of Series I., on which the usual incuse reverse is replaced by the design of a ship's prow: on the side of the prow is the sign β , which is explained as the Carian letter β or $\pi\iota$. Babelon suggests that it was struck by Memnon the Rhodian when in command of the Persian fleet off the Carian coast in opposition to Alexander the Great. In style it certainly seems to belong to the latest period of the Persian coinage.

When we attempt to determine the classification of the coinage according to periods, we find that the fixed or more or less fixed, points are few. One is offered by the hoard of 300 darics which was discovered about 1830 in the Canal of Xerxes at the foot of Mt. Athos²² together with about 100 early Athenian silver tetradrachms in the finest possible condition. It is a legitimate conclusion that darics of this group are probably not later than the time of Xerxes. The Paris Cabinet acquired 6 out of the 125 which passed through Borrell's hands²³ and these Babelon assigns to Xerxes, with the sigloi which seem to belong to the same group. One would like, before using the Canal provenance as a guide to classification, to be sure that these nine coins are representative of the hoard. In any case, it hardly seems proven that they are necessarily of Xerxes and not of Darius I. They are certainly of worse workmanship than those which Babelon would assign to the earlier king, but, especially in dealing with a series like the Persian, it is unsafe to assume that the better coins are always the earlier.

Another point which possesses a certain degree of stability is the

²⁰ Babelon, *Perses Achém.* p. 8, No. 64 = *Traité*, Pl. LXXXVI. 10, describes one. Another was in the E. F. Weber Collection (*Hirsch Katalog*, vol. 4467, Taf. LVIII., where it is described as having a cross-shaped symbol in field of obverse).

²¹ Babelon, *Perses Achém.* p. 15, No. 124, Pl. II. 22; *Traité*, n. II. 26, Pl. LXXXVII. 24. For other views see P. Gardner, *Hand. of Ancient Coinage*, p. 334.

²² H. P. Borrell, *Nouv. Chron.* xi. 1843, p. 133, note 56.

²³ In H. P. Borrell's sale (Sotheby's, 1852, July 12-21) there were only 6 darics (lots 426-31), all from the Canal Hoard, and none of these was acquired by the British Museum. It is of course quite possible that certain specimens afterwards acquired from M. J. Borrell and Woodhouse and Sabatier may have originally come from H. P. Borrell.

identification of the daric of the beardless King (Pl. V, No. 3). Babelon has made out a good case for the attribution of this rare piece²⁰ to Cyrus the Younger²¹; although it may seem rash, when we are dealing with so small a piece, to assert that the figure 'a le visage empreint d'un caractère de douceur et d'intelligence qui convient plutôt à un Grec qu'à un Asiatique,' while the statement that the kidaris is not surmounted by spikes, like that of the ordinary kings, but resembles the 'toque' of a magistrate, might be upset by the discovery of a specimen on which the top of the kidaris was fully preserved. The workmanship of the coin is certainly more careful than usual. A curious fact may be noted about the reverse; the small horned and bearded human mask²² which stands beside the incuse impression is not a punch-mark, but was worked (in relief) on the original die; it is in exactly the same position on both known specimens. It is clearly the mask of Pan or a satyr.

A third fixed point is provided by the general resemblance to the double darics of the reverses of the group with the figure in high relief (Group *K* of Series I. Pl. V, No. 6). The reverse shows a tendency to be filled with a pattern of wavy lines, which is on the point of developing into the well known pattern of the reverse of the double darics (Pl. V, No. 14). Since it is now generally admitted that the double darics belong to the Alexandrine period, these darics of Group *K* must belong to the last Persian king, Darius III. A number of sigloi, with the ordinary type of reverse, resemble these darics in the relief and treatment of the obverse. There are also a certain number of darics (e.g. one in Mr. Newell's Collection) which, although they do not show the peculiar reverse, resemble the *K* darics in the purely Greek style of the portrait.

When, however, with the help of these more or less fixed points we attempt to classify the coins within the lines drawn between them, the difficulty of distinguishing groups, and, when they are distinguished, of saying which are the older and which the earlier, still remains as great as ever. Some of the groups—such as Babelon's first three groups attributed to Darius I., Xerxes, and Artaxerxes I.—merge into each other almost imperceptibly. The coins are frequently so badly struck that it is impossible to say whether two are from the same die, or whether one is copied from the other; and, if the latter is true, the second coin may well belong to a later group than the first.

It would seem that the only direction in which a solution is to be expected is the recording of finds of darics or sigloi with other coins

²⁰ The only two specimens extant appear to be those in Paris and London, which are from the same dies on both sides. Babelon groups with them a siglos (*Traité*, Pl. LXXXVI 18) which is, to judge by his reproduction, so badly worn that the beardlessness of the figure can hardly be ascertained.

²¹ *Revue Archéol.* p. 27. On the objections

which have been raised to this identification, see above, p. 119, note.

²² Babelon's contradiction of Head's perfectly correct description of this head is perhaps due to his having looked at the coin sideways; although even so it is difficult to see a boar's head in the object.

susceptible of being dated. So far only two or three such finds have been noted or at any rate properly described. Four darics were included in the Avola Hoard, presumably the earlier of the two hoards which go by that name,²² and are therefore to be dated before about 360 B.C. The only one of these darics which has been published belongs to the small but well-marked group called *B* in this Catalogue, and is of a type attributed by Babelon to Artaxerxes II. Mnemon. Another daric, from the same reverse die,²³ was included in a hoard of Cyzicene staters²⁴ which Head thinks was probably deposited not much later than 412 B.C. Six however (in one of his letters above mentioned) dated the Cyzicene of this hoard 'before and after 400.' All the coins illustrated by Head belong to von Fritze's²⁵ Groups II. *b*, *c*, or III. *a*, *b*, except the coin with the two eagles on the omphalos,²⁶ which von Fritze places in his Group IV.; his upper limit for that group is about 410 B.C. Wroth places the same type in his third period (480-400 B.C.). We may not unreasonably assume that if it belongs to von Fritze's fourth group, as is indicated by the coarse granulation of the reverse, on which he bases his classification, it must come fairly early in the group, probably before 400 B.C. The evidence of these two finds, taken together, goes to show that the daric in question was earlier than about 400 B.C. Six remarked that this particular type of daric 'a été recueilli en nombre dans la grande trouvaille de Cyzicènes' in question; if that is so, and all were in as good condition as the one illustrated by Head, it is probable that this type of daric belongs to the last quarter of the fifth century, but that it was struck by Darius II. Nothos (424-405 B.C.) rather than by Artaxerxes II. (405-359 B.C.).

A second Sicilian hoard, from Mammanelli near Avola, has recently been described by P. Orsi.²⁷ It has unfortunately not been secured in its entirety. It contained from 390 to 400 gold coins, viz. about 100 hectolitra of Syracuse, about 100 pentekentalitra of the same mint, and about 100 darics. Of these last Orsi illustrates one and describes five, attributing them all to Artaxerxes I. Makrocheir (465-425)²⁸; they would therefore belong to our Group C. To judge, however, from the casts which he has kindly sent me, it would appear that one of them is of our Group *B*, with the distinct

²² See Miss Baldwin in *Zist. für Num.* xxii. 1915, pp. 4-8 on the two hoards. It is supposed that what was by Lübbecke taken for a single hoard, deposited about 320 B.C., was really made up of two, the earlier of which, containing the gold coins, was buried about 360 B.C. One of the darics in question (there were four) is illustrated by Lübbecke in *Zist. für Num.* xvii. 1896, Taf. vi. (wrongly numbered c.) 1. Recently this find has been discussed by P. Orsi in *Atti e Mem. dell' Ist. Ital. di Num.* iii. (1917), pp. 6 ff.

²³ This reverse die, apart from its distinctive markings, is recognizable by the

granulation at one end of the incuse. Sir Hermann Weber possessed another daric from the same reverse die, and one was sold at Sotheby's sale, 7 Dec. 1915, Lot 1.

²⁴ R. V. Hunt, *Num. Chron.* 1878, p. 280, Pl. VIII. 1.

²⁵ *Nomisma*, vii.

²⁶ *Num. Chron.* loc. cit. Pl. VIII. 6; von Fritze, loc. cit. Taf. VI. 32.

²⁷ *Atti e Mem. dell' Ist. Ital. di Num.* iii. (1917), pp. 1-30.

²⁸ He assumes Babelon's classification to be substantially correct.

reverse already noted in other specimens of that group (above, p. 123, note 34). The other four are two from one pair of dies and two from another. Neither pair seems to me to belong to 'Artaxerxes I,' i.e. to our Group *C*; in their comparatively refined style they seem to me to be of a distinct type, approximating to *B* more closely than to any other; they show the V-shaped fold in the kamlys. The find, according to Orsi, was buried in the last years of the fifth or the first years of the fourth century; the dies show more or less signs of wear. The weight of each of the five coins is 8.3 grammes.

So far the evidence does not violently contradict any proposed classifications. But when we come to the hoard of coins described by E. T. Newell,⁴⁰ we obtain some important data, which throw a new light on the question. It will be observed that in the classification given above the sigloi of Series II. are divided into four groups (excluding purely barbarous coins); on two of these groups (*A*, *B*), the body of the king is represented without any indication of the waist (e.g. Pl. V, No. 7); on the others (*D*, *E*), the attitude is less stiff, the waist is marked, and more detail is displayed in the drapery (e.g. Pl. V, No. 10). Now in Mr. Newell's find only the waistless groups were represented⁴¹; and the evidence of the other coins in the hoard proves conclusively that all the sigloi present were struck before about 380 B.C., the date of the deposit. Further, to judge by their worn and punch-marked condition, it is unlikely that any of them were struck later than the fifth century. This suggests that the 'waistless' varieties belong to the earlier kings, before the time of Cyrus the Younger, and also that the other varieties of Series II. belong to the fourth century. Further confirmation of this view comes from the hoard published by J. G. Milne,⁴² which consisted entirely of sigloi of Series I. of the earlier, sixth-fifth century, types (Groups I. *A* and I. *B* in our classification); and sigloi of the 'waistless' types of Series II. Yet again, out of eight coins obtained at Panderma, from a small hoard said to have been found at Miletopolis, seven are of the earliest types of Series I. (*A* or *B*), and one of the waistless type (Series II. *A* or *B*, much worn).⁴³ Finally, Mr. Newell provides a similar slight confirmation of the early date of the 'waistless' type. Of four sigloi which he bought at the same time from an Armenian dealer in Paris, and which, together with about a dozen others not bought, evidently came from a find, one is of the 'waistless' type, and the other three all of early types.

⁴⁰ *Num. Chron.* 1914, pp. 1 ff.

⁴¹ A siglos which Mr. Newell received from Dr. Haynes's family after the publication of his article, and which by its appearance undoubtedly belonged to the 'Cilician find,' was also of the 'waistless' type.

⁴² *Num. Chron.* 1916, pp. 1 ff.

⁴³ Mr. F. W. Hasluck, who obtained this coin from a money-changer, is not confident that the statement of their provenance was

correct. The eight coins still available for examination passed into the possession of Mr. F. S. G. Robinson, who presented two of them to the British Museum. Only one of the eight is without a punch-mark, and on no less than six of the others we find the same mark, No. 53a in the Table, p. 126. It would appear therefore that this mark was impressed by the person who had the coins not long before they were buried.

This appears to exhaust the present possibilities of chronological classification. It seems clear that types (i) *King with spear* and (ii) *King with dagger* continued in use throughout the whole course of the coinage, and that types (iii) *King drawing bow* and (iv) *King in half-figure*—which are unrepresented in the finds of early sigloi—belong to the later period of the coinage, since they approximate in fabric and style to those varieties of Series I. and II. which are not represented in the finds of early sigloi. The comparative rarity of punch-marked coins of this series admits of explanation if this chronology is adopted, and if, as I believe, the punch-marking was chiefly done in the Eastern Mediterranean.⁴⁴ It was only towards the end of the fifth century that the Persian Satraps began to make issues of any importance, and it was only in the half century from about 386 to 333 that these issues were so numerous as to supply the wants of the population under satrapal control. Until then, sigloi must have circulated in Asia Minor and Syria in great quantities, and it was in this earlier period, before the rise of the great satrapal coinages, that the punch-marking was chiefly done. But in the fourth century the import into Greek lands of the Persian sigloi must have been greatly diminished, the demand being supplied by the local and satrapal money. Hence these later sigloi are not punch-marked to anything like the same extent as the earlier.

Here we must leave the question of chronological classification. As regards the attribution of the various groups to individual kings, apart from the slight indications which have been noted above, the less said the better.

Mr. Milne has been the first to call attention to the extremely interesting groups of coins with small symbols, sometimes in relief, sometimes incuse on the reverse. These all⁴⁵ belong to the 'waistless' variety of Series II. (Pl. V, Nos. 7-9), and are therefore, if our chronology is right, of the fifth century. Mr. Milne has made the very plausible suggestion that the lion's head (Pl. V, No. 7) may indicate the mint of Sardes. The sigloi similar to Pl. V, No. 8, with what appears to be a curiously stylized lion's scalp, can hardly be separated from the others. Of the symbol on the coin illustrated in Pl. V, No. 9, I have no explanation to offer.

The Punch-Marks (Fig. 1). There can be little doubt that these⁴⁶ were impressed on the coins by local bankers or money-changers, who were also doubtless responsible for the stabbing and cutting of the coins with the object of testing their purity. One would have thought that a single cut

⁴⁴ This is also Babelon's view: *Première Asie*, p. 21.

⁴⁵ With the exception of the diam attributed to Cyrus and, possibly, of one siglos.

⁴⁶ Which must be strictly distinguished from the incuse symbols mentioned above, which form part of the reverse dies. For convenience of reference, the punch-marks which occur on coins which I have been able to examine, together with a few others drawn from casts, are collected in the accompanying

table (p. 126). It must be remembered that these marks are usually very imperfectly impressed, and it is consequently often impossible to recognise with certainty the design, or to draw it correctly. The drawings here given, though not by a professional draughtsman, are made with a view to showing no more than is visible on the original or can be reasonably inferred by comparison with other specimens.

would have been sufficient for this purpose, but some coins have been reduced almost to fragments. In spite of the occurrence among the punch-marks of



FIG. 1.—PUNCH-MARKS OF PERSIAN SILVER.

designs which suggest coin-types, such as the tortoise (No. 100 in the table) and the Aeginetic reverse design (No. 62), it is improbable that any of the

punch-marks were impressed by mint-authorities, although it is a reasonable conjecture that these Aeginetic-looking punch-marks were more probably impressed in Aegina than elsewhere. Such a head as that in No. 112 cannot have been designed by any but a Greek artist. (I beg the reader not to judge of the style of the original by the drawing.) The tetraskeles (No. 27), triaskeles (Nos. 22-26 and 186) and monoskeles (Nos. 18-21) seem to point to Lycia; and this is partly confirmed by provenance, although the characteristic central ring is absent from the tetraskeles and triaskeles. Babelon⁴⁰ has noted the letters $\Theta \Sigma$ which are found on Lycian coins. Certain marks, such as the varieties of *ankh* (Nos. 147-151) and forms like Cypriote signs for *ba*, *si*, and *vo* (Babelon, *Perses Achém.* Pl. XXXIX. 8, and our Nos. 121-123), or Phœnician letters *gimel*, *yod*, *pe*, *mem* (Nos. 124-132) seem to indicate the coasts of Cilicia and Syria and Cyprus as a source. Rapson⁴¹ it is true, held twenty-four years ago that some at least of the punch-marks were Indian in origin, and included Brāhmī and Kharosthī characters. But of the former, his *yo*, if turned upside down would serve for the Cypriote *si* (No. 121), his *vi* is more probably a more or less mutilated *ankh*, his *kha* is the Lycian monoskeles (Nos. 18 f.); his *pa*, if turned upside down, may be the Phœnician *p* (No. 128); his *ja* may be the Greek E (Nos. 117-119). He is inclined to think that his *go* (No. 140), is more probably to be completed as the symbol No. 81; but, as a matter of fact, it must be conceded to him that the form as given is correct. This exhausts his list of Brāhmī characters. Of the Kharosthī his *ma* is, he admits, in some instances at least, probably a crescent (Nos. 45 ff.); his *me* is a kind of flower (Nos. 70 ff.); his *puta* is really the symbol No. 173, his *ti* may equally well be a Phœnician *mim* (No. 132), while his *du* and *ha* (Nos. 138 ff.) are not sufficiently characteristic to afford strong evidence on either side. Newell⁴² has added one or two more to this list of alleged Indian characters. No. 138 in our table he compares with Kharosthī *ta*, but there is nothing very close to the form in Bühler's table.⁴³ No. 139 (drawn by him without the complete loop on the right hand) he compares with Kharosthī *gha*; as here drawn it comes much closer to Brāhmī *cha* (upside down). His Nos. 32 and 10 I take to be floral in origin, and less angular than he has depicted them; his No. 24 (our No. 141) is not really very like Brāhmī *khi*; nor do I quite see with which Brāhmī sign he would identify his No. 31; his No. 37 is hardly characteristic enough to serve as basis for argument. On his coin No. 94 he says there is an elephant punch-mark, but this is not visible on the cast before me, unless his No. 12 is meant for it; and that appears to me to be a geometrical design of some kind.

⁴⁰ *Perses Achém.* p. xi and p. 7, No. 38.

⁴¹ *Journal of the R. Asiatic Society* (1893), pp. 305 ff. I understand that he no longer maintains this view, at least in its entirety.

⁴² *Nam. Chron.* 1914, pp. 27 f. I have drawn those which are included in our table from casts of his coin. It should be said

that the little table illustrating Mr. Newell's article in *Nam. Chron.* was re-drawn in England for purposes of reproduction, and may not always do justice to his intention.

⁴³ "Siehe die Tafeln zur Ind. Paläographie" (*Gesamte der Indo-Arischen Philologie und Altertumskunde*, 1895).

At the best we may grant that there is occasional coincidence between the punch-marks and the forms of Indian letters, and that it would be very satisfactory if their identity could be proved, since many marks otherwise uninterpreted would acquire significance. But we may still ask for more evidence that these Indian letters were used to any extent by the Indians in marking their own silver coins. Other marks they used in plenty, but these apparently not at all, or only to a very limited extent.

Of the three symbols which Rapson instances, the 'taurine' (Nos. 40, 41) would give most support to the Indian theory, if it could be shown that this astronomical symbol was peculiar to India. But there seems to be little doubt that it is not so confined and, indeed, that its home was rather in Eastern Asia Minor, Northern Syria, or Cyprus⁴¹. Nos. 60 and 58 on the other hand might be Cypriote or Lycian letters (though they are more probably mere patterns); and the triskeles, though it may be nearer the Indian⁴² than the Lycian form, is too widely diffused a symbol to carry much force in the argument. It is worthy of notice that three specimens marked with the triskeles probably came from Lycia, since they were once in the collection of Daniell and Graves; and one marked with the tetraskelos came from a Smyrniote collection. The tetraskelos occurs on one of Mr. Robinson's little find from Miletropolis. Finally, of all the sigloi in the British Museum, only five come from Cunningham or the India Office, and of these it is significant that only one is punch-marked. There are in the British Museum no other sigloi of definitely Indian provenance, though there are many from Persia.

A day spent in examining carefully the collection of Indian punch-marked coins in the British Museum, while the punch-marks on the sigloi were still fresh in memory, the drawings for the accompanying table having just been completed, has left the distinct impression that the two sets of punch-marks have nothing whatever to do with each other. There may be certain curious coincidences as between a mark on one of the Indian coins and No. 153, although the Indian example does not show the hooked handle of the blade (or stalk of the leaf, whichever it may be). But the point to remember is that the leading characteristics of the two sets are quite different; the forms chiefly characteristic of the sigloi, such as the floral symbols (Nos. 68 ff.), the *ankh* (Nos. 147 ff.), the bull's head and its derivatives (Nos. 105 ff.) occur with extreme rarity or not at all on the Indian coins; and forms characteristic of the Indian series, such as the Stupa, or Chaitya, do not occur on the Persian.

⁴¹ Mrs. Maudslayi refers, in this connexion, to the Cypro-Mycenaean cylinder, *J.H.S.* xxi (1901), p. 169, Fig. 147. This is an example of the orb surmounted by a crescent, which is doubtless the origin of the symbol; and this crescent resting on a globe seems to be of Babylonian or Mesopotamian origin. The punch-mark with the two crescents back to

back (No. 42) is also probably a lunar symbol. See Rasmussen's *Lex. A.S.* 909.

⁴² As a matter of fact, I do not find on the Indian punch-marked coins in the British Museum anything corresponding exactly to the form on the sigloi except in the case of No. 22; Rapson appears, from his remark on p. 396, to have met with the same difficulty.

It would probably be possible with a little ingenuity to find a number of analogies between these punch-marks and signs in various other scripts. Thus Nos. 52, 58, 117, 120, 124, and 133, and Mr. Newell's No. 37 (inverted) could all be interpreted as Lyoian *spiritus asper*, sonant *m*, *l*, *s*, *λ*, *σ* and *τ* respectively²² and some of the same, of course, as pure Greek; or again No. 142 as Himyarite 𐩦, while Nos. 30 and 143 both suggest Himyarite symbols. But it seems idle to lay stress on these resemblances, which may be purely accidental.

G. F. HILL.

²² On the other hand the alleged Lyoian 𐩠 (Fellows, *Coins of Ancient Lycia*, Pl. VIII, 2)

Babylon, *Presses Achéennes*, p. 31) is really No. 172 in our table.



FIG. 1. —KRATER FROM ORVIETO, REVERSE.

MIKON'S FOURTH PICTURE IN THE THESEION.

SINCE the first publication by Robert¹ of the magnificent krater from Orvieto, which is one of the proudest possessions of the Louvre, its style has been brought in connexion with Mikon, more on account of the figures half disappearing behind the rocks, than on the rather problematic assumption that Mikon's Argonauts might have inspired the artist in the more extensive picture on the side of the vase opposite to the death of the Niobids. This last scene (Fig. 1) is perfectly clear, and would not be in need of any new commentary if Robert had not committed the error of taking the arrow, near the handle, as fallen (*freccia caduta per terra*), holding this to be a piece of thoughtlessness, rather uncommon with Attic ceramists, and if Hauser² had not gone even further, blaming the painter for so absurdly making an unerring god shoot an arrow and lose it. Both of course are wrong; and it is the more surprising that he who understands what escaped Robert—namely that Apollo shooting and Artemis taking a new arrow suggest to our mind the presence, though unseen, behind the hills of the missing sons and daughters of Niobe—fails to understand that the painting is not a poor extract from a larger composition, but that it was precisely the perhaps somewhat extravagant intention of the artist to suggest more than he shows.

¹ *Annali dell' Instituto*, xlv. 1882, p. 273.

² *Furtwängler und Reichhold*, in Taf. 108, S. 250.

This arrow indeed answers, if anything, to the proverb: *θάρρος ἢ Βούτης*; as Mikon in the Poikile still painted the eye and the helmet of his Butes, while the Niobid, lying dead in the valley, is only shown to us by the single line of the weapon that inflicted the mortal wound. So instead of being a piece of ridiculous thoughtlessness this little stroke speaks volumes.

It is not only to defend the vase-painter, or Mikon as his model, from unmerited blame, that I claim his right to be understood when he suggests the unseen to our mind's eye. It is principally because we shall need this understanding of his intention to elucidate the meaning of the unexplained picture on the other side of the vase²⁰ (Fig. 2).

Robert was the first who supposed this scene to be taken from the story of the Argonauts painted by Mikon in the Anakeion at Athens and briefly described by Pausanias²¹ in these words: *Μίκων δὲ τοὺς μετὰ Ἰάσονος ἐς Κόλχους πλεύσαντας καὶ οἱ τῆς γραφῆς ἡ σπουδὴ μάλιστα ἐς Ἀκαστοῦ καὶ τοὺς ἵππους ἔχει τοὺς Ἀκάστου*. As it did not escape his notice that Pausanias seems once more to refer to this picture when he mentions the names of the daughters of Polias; *Μίκων δὲ ὁ ζωγράφος Ἀσπερσίαν τε εἶναι καὶ Ἀρτιόνην ἐπὶ ταῖς εἰκόσιν αὐτῶν ἐπέγραψε*,²² he assumed that what we have would be only part of the more extensive original.

It has been objected by others that as neither the horses of Akastos nor the Peliads are to be found in our scene and nothing points decisively to the Argo, not to speak of Iolkos, it brings considerable pressure on our good will to accept this combination.

Nor have Percy Gardner²³ or Girard²⁴ bettered this relation in transplanting the Argonauts to Kyzikos or Lemnos, which completely severs all connexion with the painting of Mikon in question, even though they can account for the absence of the Argo herself. Girard's view has the advantage of harmonising with the helplessness which seems to bind the greater majority of the men, here assembled, to the spot; and he certainly has an advantage in this respect over Hauser, who wishing to remain in closer contact with Mikon, would make us believe that these heroes are thus inactive spectators of the battle of Marathon, as by a very unsatisfactory argument he maintains Mikon may have depicted them in the famous painting, which others on better grounds give to Panainos. Nevertheless Hauser is right when he adduces the absence of the Boreads against the whole Argo-theory and that of the Lemnian women in particular against the views of Girard.

We should only have to confess our ignorance if Gardner had not shown the way, though he has not followed it up.

²⁰ I have to thank the publishers, F. Bruckmann A.G., at Munich, for their kind permission to reproduce this plate.

²¹ I. xviii. 1.

²² VII. ii. 2.

²³ *J.H.S.* x. 1880, p. 117.

²⁴ *Revue des Etudes Grecques*, 1894, p. 360, *Monuments Grecs*, 1895, p. 7.

But before following up on the line he has indicated, let us once more consider what the work itself tells us. The scene takes place at the top of a rocky slope, behind which one single figure, only visible to the middle and reduced in size by the distance, lifts up his hand in astonishment at something that is hid to our sight by the rocks. In a gap between these, Herakles stands, γυμνός, that is to say with neither helmet nor cuirass, shield nor greaves, though he is armed with club and bow and sword, bears a lion-skin and wears a laurel wreath in sign of victory. Around him stand, in addition to his patron-goddess, who never leaves him, three men, of whom one hands him a helmet, one takes up a shield, a third grasps at a lance, we may suppose with the same intention. At his feet sits a young man



FIG. 2.—KRATER FROM ORVIETO, FRONT.

with despondent look, who with his right hand holds his leg as if he were tired of sitting, like Hektor in Polygnatus' Nekyia²—*καθεζόμενος ἀμφοτέρως ἔχει τὰς χεῖρας περὶ τὸ ἀριστερὸν γόνυ ἀντιώμενον σχῆμα ἐμφαίνων*. Under him his comrade, to whom he beckons with his left arm, rises, a couple of lances in his hand, not without effort, from his more prostrate situation. At the left a man, whose shield is charged with a coiled serpent, turns away very much in the manner of the Thracian³ who, while his comrades give themselves over to the magic of the music of Orpheus, goes away in disgust.

² Pausanias, x. xxvi. 3.

³ Fifth-century Hellenism program, Eastwanger, i. ii.

The scene is closed on the right and the left by two youthful heroes, wearing *pilei*, one of them holding a horse: these are generally thought to be the horse-taming Kastor and his brother Pollux. As they belong together, it seems probable that we have to see the locality as a hollow, the order in which the figures appear having to be considered as a circle; nearly closing here, as on the semicircular bases of the time at Olympia and Delphi.

Now Gardner has recognised in the two sitting youths Theseus and Peirithous, and he is right. Only if in Hades the shades find their punishment in the performance during eternity of the impious act committed during lifetime, we are not justified in reversing this idea and hoping to find them alive in the scheme that characterises their eternal sufferings.



Fig. 3.—KASTOR FROM BOEOTIA.

So if Peirithous is sitting here for ever and Theseus rising from a rest that seemed endless, it can only be the valley of death that Herakles enters, and those he meets can only be shades, with the exception of Athens, who stands by him under the earth as she stands by Theseus at the bottom of the sea on the cup of Euphronios.

And if amongst these the Dioskuri take a prominent place, do not let us forget that Pindar about the same time dwells at length on the touching legend of brotherly love, that made the heavenly Pollux give over half his Olympian life to Kastor and partake during the other part of his existence in the infernal world,⁹ as Zeus sums up in these words:¹⁰

⁹ See also the end of *Pyth.* xi. τὸ αὖτε καὶ Ὀνόμαον.
καὶ ἑταίροις θεοῖσιν ἐκείνους ἐκείνους ἐκείνους

¹⁰ *Nem.* 2. 108.

Εἰ δὲ κασγνήτον πέρι
 μάχρασαι, πάντων δὲ νοεῖς ἀποδείσασθαι ἴσον,
 ἡμῖν μὲν κε πνέουσιν γαίης ὑπὲρσθεν ἰών,
 ἡμῖν δ' οὐρανοῦ ἐν χροσέοις δόμοισιν.

It is true that in the painting of Polygnotus, Theseus holds two swords, both his own and that of Peirithous:¹¹ *Θησεύς μὲν τὰ ξίφη τὸ τε Πειρίθου καὶ τὸ ἑαυτοῦ ταῖς χερσὶν ἀμφοτέραις ἔχει, ὃ δὲ ἐς τὰ ξίφη βλέπων ἐστὶν ὁ Πειρίθους*, but on a vase from Ruvo at Karlsruhe¹² the arms in the hands of Peirithous are lances, and so also on the other¹³ where the intruders are being bound. The poetic source upon which the painter has drawn will have had the word *ξίφος*, which is used by the epic writers to designate a spear, by the tragic poets for a sword.

It is hard to put names to the other figures, but it would not have been easier to name those in the Nekua of Polygnotus if it had come down to us without inscriptions.

One would like to be able to recognise at least Meleager, as we know of his intercourse with Herakles in Hades, but neither the youth wearing a helmet, to whom the hero turns, nor the bearded man with the petasos, who, even as Peirithous, so clearly shows the *broken eye* and the distorted face of those that, eating dust, grind their teeth, nor any other has the least token that might characterise him as such.

They are as anonymous as the souls of the miserable humans Herakles meets according to the words of Bacchylides:¹⁴

ἐνθα δυστήριον βροτῶν
 ψυχὰς ἰδὼν παρὰ Κεκρυτοῦ πείθοις.

The only emblem that may give us any clue is the snake on the shield of the man who turns away. This dragon might indicate Kadmos or Jason, but I fail to see what reason the founder of Thebes should have to be angry with the hero who was the glory of his town, or the leader of the Argo with the man he left behind.

Iphitos has perhaps the most cause for wrath against Herakles, as the otherwise spotless hero has sinned gravely by the murder of his guest, but though the serpent would well fit with his chthonic nature, I am afraid this was not so apparent to the contemporaries of Mikon as to us. The same reason prevents me from thinking of Eurytus, Hippokoon or whatever the different names may be in different regions of those who fell in the expedition of Herakles against their strongholds, with the exception of Periklymenos, whose name Robert has used in describing this figure.¹⁵ He too is a personification of death vanquished by the rescuing might of the god-like hero, but death lurking in the bite of a snake, the grip of an eagle, the

¹¹ Paus. x. xxix. 9.

¹² *Arch. Zeit.* 1884, Taf. 18; Roscher iii. Sp. 1786, Abt. 12.

¹³ *Arch. Zeit.* 1884, Taf. 15; Roscher iii.

Sp. 1781-2, Abt. 10.

¹⁴ v. 63-4.

¹⁵ *Nekua*, p. 40.

sting of an ant or a bee or the poison of a plant, the weight of a falling tree. So at least I understand what Hesiod must have meant, according to Eustathius' commentary on the *Odyssey*¹⁶ and in the lines preserved by the scholiast on Apollonius:¹⁷

Περικλόμενον τ' ἀγέρωχον
 ὄλβιον, ᾧ πόρε δῶρα Ποσειδάων ἐνοσίχθων
 παντοίᾳ. ἄλλοτε μὲν γὰρ ἐν ὀρνίθεσσι φάνεσκεν
 αἰετός, ἄλλοτε δ' αὖτε πέλεσκετο, θαῦμα ἰδέσθαι,
 μέρμηξ, ἄλλοτε δ' αἶτε μελισσῶν ἀγλαὰ φύλα,
 ἄλλοτε δεινός ὄφις καὶ ἀμείλιχον. εἶχε δὲ δῶρα
 παντοίᾳ οὐκ ὀνομαστά, τί μιν καὶ ἔπειτα δόλωσεν
 βουλῇ Ἀθηναίης.

So the serpent may point to Periklymenos and Robert may have hit the mark, though we must needs remain somewhat diffident, as the emblems on the shields are rarely so speaking as a swan on that of Kyknos. The serpent on the shield of Menelaos in Polygnotus' Ilioupersis is considered by Pausanias¹⁸ in a rather far-fetched way to be a remembrance of the portent in Aulis.

If it nevertheless seems probable that this scene is played in Hades, it is no longer difficult to suggest what it is that the warrior outside (whom I presume to be Iolaos, the faithful comrade who followed even to the gates of hell, though no further), sees that excites his admiration and that he suggests to our mind by his wonder. It is of course the vanquished Kerberos, as must have been evident to all spectators, who were aware of the circumstance of this most famous victory, which had to be obtained unarmed (that is to say without shield or iron arms), but was won, according to the scholiast on Homer¹⁹ by the hero using his lion-skin as a shield, and flint-pointed arrows, according to others with his club. The artist who thus reminds us of the wondrous feat, which he does not want actually to show, makes it more obvious by the returning of his arms to Herakles. If he does this in a somewhat naïve way, seeing that they are given back here by the inhabitants of the land of darkness into which the victor has only just forced his way, we must understand that he could hardly do it in any other, and that this is certainly not in discordance with the methods of his age, as Robert²⁰ has shown by similar examples.

Now, if we reconsider the question whether we know of a painting by Mikon that would answer to our purpose, we will find exactly what we want in a suggestion of Brunn,²¹ who, with his thorough knowledge of the style of Pausanias, suspected a fourth picture of Mikon in the Theseion at Athens, where, next to his famous deeds in the struggle with Centaurs and Amazons and the first exploit of Theseus (known to us principally from this passage, Bacchylides, and some vases), his end would have been depicted.

It cannot, of course, be his death at Skyros which he means, but only

¹⁶ 1085, 61.

¹⁷ *ad. l.* 136.

¹⁸ s. 1111, 3.

¹⁹ *Il. v.* 355.

²⁰ *Bibl. anal. Lat.*, p. 26.

²¹ *Geschichte der Gr. Künstler*, II, p. 34.

the descent into Hades which he has in view, if we look at the words of the author²¹: ἐν δὲ τὴν τελευταίην τὴν Θησεῖος πολλά ἤδη καὶ οὐχ ὁμολογούντα εἶρηται δεδέσθαι· τε γὰρ αὐτὸν λέγουσιν ἐς τόδε ἔως ὑφ' Ἡρακλείους ἀναχθεῖν. This is all he would say about the painting in the slovenly way he treats the antiquities of Athens. What he further adds does not pertain to Mikon's work, but is meant merely as a historical rectification of the miraculous and hence incredible legend which the painter has followed. The adventures of Theseus for our author have nothing supernatural. We find him euhemerising the descent into the Acherontic regions by locating them in the Thesprotian Kichures in like manner, if not quite as clumsily, as Plutarch²² does when he makes Aidoneus into a Molossian king whose wife was called Phorsephone, whose daughter was Kore and whose dog Kerberos had to fight the suitors of his child.

What the literary source may be from whence Mikon took his subject will be difficult to decide, since we know so very little about the *Herakleia* and *Theseia* which Aristotle²³ tells us were of so poor artistic merit, and no more about Hesiod's poem mentioned by Pausanias²⁴ thus: καὶ ὡς Θησεῖος ἐς τὴν Αἴδην ὁμοῦ Πειρίθου καταβαίη. One thing only seems evident, viz. that the *Minyas* upon which Polygnotus must have drawn, and which, according to Pausanias²⁵ did mention both Theseus and Peirithous in Charon's ferry-boat, cannot come into question, as our painting lacks all Orphic colour. Panyasis has the best claims, since he speaks of the heroes as not bound but grown to the rock, only this rock is shaped into thrones: Πανιάσις δὲ ἐποίησεν ὡς Θησεῖος καὶ Πειρίθου ἐπὶ τῶν θρόνων παράσχοιτο σχῆμα οὐ κατὰ δεσμοτάς, προσφύεσθαι δὲ ἀπὸ τοῦ χρωτὸς ἀντὶ δεσμῶν σφίσις ἔφη τὴν πέτραν.²⁶

At all events, if we consider the exposition Pottier²⁷ has given, with no less wit than common-sense, of the way in which Theseus supplanted his friend Herakles in Attica, we shall have to reckon with the existence of a jingoistic production of national poetry, which could not be very much antiquated in the time of Mikon.

The story itself is one version out of many of the same phenomenon. Theseus, born from the sea, be its name Aigous or Poseidon, and the clear sky, Aithra, makes his first appearance, lifting up the dark rock, with a glittering sword and golden sandals. He *dives* into the deep water for the ring of Minos, to *reappear* with the wreath of Amphitrite. He *descends* into the Labyrinth, and having slain the bull of Minos, the judge of the dead, sleeps with his daughter, the *all-hallowed*, Ariadne, Cretan Ariadne, till Hermes leads him away,²⁸ and he leaves her for her *shining* sister, Phaidra.

²¹ Paus. I. xvii. 4.

²² *Theseia*, xxii. 6.

²³ *Poetics*, viii.

²⁴ ix. xxxi. 5.

²⁵ x. xxviii. 2.

²⁶ Paus. x. xxix. 9.

²⁷ 'Pourquoi Thésée fut l'ami d'Hercule'.

Study read in the Institut de France, Oct. 25, 1900 (*Revue de l'Art Ancien et Moderne*).

²⁸ *Mon. d. Inst.* xi. pl. XX. The vase permits no doubt that the sleeping woman is Ariadne, and the movement of Theseus that he is stealing away.

He goes down to the regions of Hades for the rape of Persephone, and is brought back to daylight by Herakles. He throws himself from the steep rocks of Skyros into the sea.

Why should Mikon out of these four parallel tales about the setting sun and its passage through the vale of darkness have chosen the first and the third? The second may have been thought antiquated, and the last not a very sympathetic double of the first. The descent to the regions of Acheron allowed the painter a no less large scope for his fancy than the meeting in the realm of Poseidon.

And if we see his four pictures in the light of Pottier's political insight we find them glorifying the young Athens as a child of the sea, depicting its struggle against the barbarians of Asia in the strife with the wild Centaurs and the battle with Oriental Amazons, no less than the similar deeds of the Doric Herakles; and symbolising the most adventurous act of the State, the help lent to the hopeless enterprise of the revolted Ionian, which leads ultimately to the capture of Athens by the inexorable enemy, from whom it is only released by Dorian help. It looks as if Mikon, with his Lacedaemonian sympathies, sought with the help of such a myth to impress this fact on the Athenian mind. It is he who brought the pretended bones of the hero to Athens and arranged his holy place there, as Pausanias²⁹ has it: *ὁ μὲν δὲ Θεσέως σπῆς Ἀθηναίοις ἐγένετο ὕστερον ἢ Μῆδοι Μαραθῶνι ἔσχατον. Κίμωνος τοῦ Μιλτιάδου Σκυρίους παῖδας αὐαστάτους, δίκην δὲ τοῦ Θεσέως θανάτου, καὶ τὰ ὅστις κομίσαντος ἐς Ἀθήνας.* So it will have been this statesman who deliberated with the painter about the subject he had to depict.

Mikon was the older contemporary of Polygnotus, a fact I have been aware of as long as I have been interested in these questions, and which I am happy to find at last correctly set forth by Klein.³⁰ The paintings on the walls that surrounded the so-called tomb (planned, be it about 473, according to the last surmise, or in 468, the date accepted formerly) must be anterior to his other works which we know of, as in the Anakeion, where Polygnotus, and in the Stoa Poikile, where at least this painter and Panainos worked beside him. Von Wilamowitz³¹ and Robert³² date the paintings in the Delphian Lesche, no doubt rightly, between 458 and 447, and so the relation between Polygnotus's Nekyia and Mikon's deliverance of Theseus must needs indicate that the former was dependent on the latter. Still, it is worth while to add to Gardner's comparison of Theseus and Peirithous, which gave us the key to the problem, the already observed more formal likeness of the Peirithous to the Delphian Hektor, and that of the man with the petasos to Antiochos with his foot on a rock: *Ἀντίλοχος τὸν μὲν ἕτερον ἐπὶ πέτρας τῶν ποδῶν.* This last motif, which found its development in sculpture only at the hands of Euphranor, Skopas, and Lysippos, seems to be an invention of Mikon, as we find it also in an

²⁹ I. xvii. 6.

³⁰ 'Mikon und Panainos, Mikon und Peirithos,' *Jahrbuch des Instituts*, xxxiii. 1918.

p. 1 ff.

³¹ *Historische Untersuchungen*, 223a. 10.

³² *Nakula*, p. 76.

Amazon²³ on an early white-figured lekythos, which must be a reminiscence of one of his Amazon-battles.

The man, again, who turns away from Herakles, finds an analogy in the Klymene of the *Lesche* of whom Pausanias²⁴ says that she turns her back to Prokris (παρὰ δὲ τὴν Θμίαρ Πρόκρις τε ἕστηκεν ἡ Ἐρεχθέως καὶ μετ' αὐτὴν Κλυμένη, ἐπιστρέφει δὲ αὐτῇ τὰ ῥῶτα ἡ Κλυμένη), because as the Nostoi relate, the latter was the first wife of Kephelos. One would rather expect: ἐπιστρέφει δὲ τὰ ῥῶτα αὐτῇ τῇ Κλυμένη as it is not Klymene but Prokris who should feel wronged. And this is partly suggested by the manuscripts, which have these words, with the exception of the two last, as I give them. Be this however as it may, the turning away is the *motif* that serves us for comparison.

Lastly I mention, though not without some reserve, the feet of Kallisto resting on the knees of Nomia, τοὺς πόδας δὲ ἐν τοῖς Νομίας γόνασιν ἔχει κεκλιμένους, which seem to remind us, as Gardner has observed, of the feet of Peirithous hanging over the knee of Theseus.

Of even more importance than these signs of influence, though they may to a certain extent confirm our view that we have a copy of Mikon's Hades before us, is the comparison of the planning of his locality as we have understood it, with the much larger disposition of the different circles in Polygnotos's Orphic-hell.

But I am nearly forgetting that, to my knowledge, no attention has yet been drawn to the plan of this first *inferno* known to us as a forerunner of Dante's.

If we analyse Virgil's descriptions of the different sections through which Anchises goes, we find, according to Norden,²⁵ between Acheron and the innermost Hades, first (v. 323) *Cocyl' stagna alta . . . Stygianque paludem*, the *ἄσποιοι*, the uninterred and the infants, then (v. 427) *in limine primo* the *βαιοθάνατοι*, those that died a violent death, as: (v. 430) *hos iusto*, the falsely condemned; (v. 434) *proxima deinde . . . loca*, the suicides; (v. 441) *lugentes campi*, those who died of love, and (v. 477) *arma . . . ultima*, the heroes that fell in war. In Hades itself are three distinct regions: for those that suffer eternal pain, the *Tartara* (v. 543); for the eternally blessed, the *sedes beatus* (v. 639); and thirdly for those that go through forgetfulness before entering upon a new existence, *Lethaeumque domos placidas qui praenatalat umnem* (v. 705).

The regions of Polygnotos are far from identical, but there is a likeness even as there is some affinity to Nardo Orcagna's Dantesque hell in Sta Maria Novella at Florence. In the *Lesche* the outermost circle is that of utter darkness and contains besides probably Eurynomus, the demon of decay, none but those that suffer eternal punishment, the parricide, the sacrilegious and Tityos to the left, Sisyphus and Tantalus to the right. Parts only of this region fill up the corners of the painting, separated by both ends of the segments that are shown of the following ring, a kind of

²³ *Jahrbuch d. Inst.* II, Taf. 11.

²⁴ v. xxix, 8.

²⁵ *Aeneis*, vi. 14.

limbo for those who like Elpenor remain unburied, who like Oknos have spent their lives in idleness or who, missing the salvation of the mysteries, have struggled for good in vain, carrying water in a cracked vase. This stretch is crossed by Charon's boat that carries the initiated. Farther in to the right and the left the lands of sorrow appear, thronged with women who suffered for love. The innermost circle is peopled by the heroes who fell in war. It may be observed that even Theseus and Peirithous sit by them, not amongst the great sinners as in Virgil.³⁶ Finally a quasi-central position is allotted to the poets and specially to Orpheus.

This disposition must have been indicated by lines tracing the hilly slopes and accentuated by a colour-scheme that probably sufficed for a disposition into large groups, without preventing the eye from finding an equal interest everywhere, in the corners as well as in the centre; a decentralising principle of composition justly preferred for paintings intended to decorate a large surface, that is to be seen from a short distance.

Mikon, no doubt, had a less complicated scheme, but still it is remarkable, in view of the continuity of tradition in the development of ancient art, that his composition shows even the same circular disposition as we have observed in the place he gave to the Dioscuri.

All these reminiscences, of course, would not by themselves prove our vase-painting to be the deliverance of Theseus by Herakles, but they go a long way to sustain our conclusion, reached by other means, that Mikon painted Hades before Polygnotos.

On the other hand, the painting in the Theseion, whether shortly after 473 or 469, shows the closest relation to the Hoplitodromos of the Souzée Collection (Taf. III.-V.), so nearly alike to the Pelops of the Olympian pediment, which Furtwängler has suggested was copied from an original in the same pose as the statue by Mikon of Kallias the pankratiast, who won his Olympian victory in 472. He says³⁷: *Der rechte Unterarm war erhoben und eine Stütze verband ihn mit der Brust. Das passt für ein Halten von Lanze oder Schwert durchaus nicht. Ich kann nur diese Haltung nur erklären, wenn die Rechte etwa den Gestus des Adorierens machte.*

So the man who holds out the helmet to Herakles has nearly the same schema. Still closer is the resemblance of our Pollux, his right hand on his hip, his left holding the lance, to the Olympian Oenomaos, who will not be much later than the Kallias. This type occurs, once more, in the Apollo of the coins which Themistokles struck as lord of Magnesia after 463,³⁸ where for the lance is substituted a branch of laurel. It is evidently another example of the art of Mikon. Herakles must be compared to the Zeus of the pediment.

It remains to say a word about the well-known krater from Bologna.

³⁶ v. 617: *sedebat aeternaque sedebat in felix Theseus*. It seems worth while to remark that Virgil does not fall into contradiction with himself when he cites (v. 122) Theseus amongst those that return from

Hades alive. In the time of Aeneas Theseus was dead once more and this time for good.

³⁷ *Sammlung Souzée*, p. 5.

³⁸ Hill, *Historical Greek Coins*, p. 45. Pl. III. 35.

with the reception of Theseus at the bottom of the sea³⁹ (Fig. 3). Jacobsthal⁴⁰ is surely right in so far as the style of this work in every line and form and ornamental detail is certainly more than a generation posterior to the work of Mikon, but he goes too far, it seems, in postulating the necessity of the influence of another great artist for the composition in its general outline. His principal argument is that, though kings and heroes and ordinary mortals had been used, more than a century, to eat and drink in a recumbent position, no gods but Dionysus and Herakles followed their example, and that the rest of the Olympians maintained the ancient and more dignified custom of sitting at their meals till the times, let us say, of the young Parrhasios. The remark is interesting, but the sole example he cites to corroborate this opinion—vases of Sosias, Oltes, Euxitheos—are, as he himself admits, anterior to Mikon. An innovation must make a beginning at some point or other. There is no reason why the great naturalistic innovator, Mikon, should not have been the first to make Poseidon, at home, drink at his ease the cup that so rare a page as Eros mixes for him.

On the other hand, the general disposition of the whole composition is so perfectly in the same spirit and the same form as the deliverance of Theseus that they obtruded themselves on the notice as counterparts even before a closer connexion was established. I need hardly give further details to prove this in respect of the place the figures take among the rocks, their distance from each other, and their size in relation to the dimensions of the picture, however important these be in determining the style of a master. Nor need I dwell at length on the place taken by the team of the rising Eos⁴¹ behind the mountains that enclose the sanctuary of Poseidon parallel to that of Iolaos; nor on the representation of the sea as a narrow channel (in the foreground and background tripod-bearing columns indicate the shores that compass the water) resembling the confines of the infernal world; nor on the contest that is fought and won unseen behind the rocks, even as the stern of the ship of Minos shows naught of his quarrel with Theseus, which made him throw his ring into the deep. But I will draw attention to the *schema* of Poseidon, which forms on the left the exact counterpart to the rising Theseus on the right; he reclines with one leg drawn up, the other outstretched, his right hand reaching high at his trident as the left of Theseus does at his lances. The cardinal difference is that Theseus is all movement, however lethargic it may be, and well-directed action, while Poseidon is hardly more than a nearly superfluous 'pendant' imagined for the sake of balance. Both, enhanced as they are by still life, Theseus by shields and a helmet, Poseidon by a tripod and an oinochoë and krater, take a prominent place in the compositions and so, I think, go far to prove that they were intended to counterbalance each other. As Pausanias mentions

³⁹ *Mon. d. Inst. Suppl. T. xxi.*

⁴⁰ *Theseus und sein Meeresthronos* (Leipzig, 1911), p. 14 ff.

⁴¹ She has been wrongly interpreted as Helios as may be seen by her hair-net and the presence of the morning star.

them last, after the long-continued battle with the Amazons and struggle with the Centaurs, which must have occupied the other walls of the temenos that enclosed the *sekos* of Theseus, I would suggest that they were to be seen on either side of the door as the visitor turned to go out.

Be this, however, as it may, the exact correspondence goes a long way to prove that the Releasing of Theseus has preserved to us the truest reproduction we possess of a work of the master in a copy of the picture which Pausanias mentions in such a desultory way, and that the Theseus krater is hardly less reliable in its composition, though not in the execution. So it seems worth while to add a few words to elucidate what remains unexplained in this picture.

The presence of Nereids need not surprise us at the court of Poseidon and Amphitrite, but one asks oneself what the shield-like musical instrument in the hands of the Nereid farthest to the right may mean, till one is reminded of the deep sound made by the waves beating on the beach and takes it for granted that this drum must indicate the *κύματα ἡχέοντα*. As she sits at the end we might call her Aktáie. As to the presence of Eros here, I see nothing but a reminiscence of the origin of Theseus, Love mixing the *φάρμακ* that made Poseidon the father of the young hero, on whom the sea-god casts his eye with pride as Triton bears him in his arms, ready to receive the crown of roses extended to him by Amphitrite, a marriage gift which she got herself from Aphrodite.⁴¹ The vase-painter's intention of drawing roses is not to be mistaken if one thinks of the single roses of the ancients.⁴²

We know Greek painting by the scanty notices of the authors, by the figured vases, and by the reflections in Etruscan tombs and Greek basso-relievi. There is no doubt that the Greek painters began by figures that stood out dark upon a lighter ground, and as we still find this method continued on the white lekythoi, cups, and kraters, we have no reason to doubt that, generally speaking, a similar effect will have been usual in the pictures of these times. We may even observe here and there in red-figured vase-painting an evident indication of this fact, but we give a single instance out of many, convincing enough in itself. Helena, in the well-known scene,⁴³ which probably reveals to us the art of Aristophion, shows her profile standing out clearly against her loose hair, like a Florentine quattrocento head in three-quarter on a light sky. This artifice has no sense on a black surface, such as the vase has.

The coloured figures on a lighter ground of the antique porous reliefs give place to the lighter bright-coloured marble designs on a darker blue as early at least as the Delphian treasure-houses of the Knidians and Siphnians. Pheidias and his school in the chryselephantina or marble appliqué on the

⁴¹ Bacchylides, xvii. 114 ff.

⁴² Brit. Mus. *Catalogue of the Greek Coins of Caria, Cos, Rhodes, etc.* Pl. XII. 1-7. Wickhoff, *Römische Kunst* (Die Wiener

Geneseis), Fig. 10.

⁴³ *Mus. Gregor.* II. Pl. 2. 21; Overbeck, *Gall. Her. Bild.* I. Pl. 26. 12; Michaelis, *Parthenon*, p. 139.

black Eleusinian stone of the basis of the Zeus or the Parthenos and the Erechtheion frieze seek a similar effect to that aimed at by Panainos on the dark blue screens between the legs of the Olympian throne, and the vase-painters give the same relation to most of their work, the red-figured compositions. In later times the white figures on dark-blue glass, as in the Portland vase, continue this effect and the Greek portraits from the Egyptian tombs generally stand out on a dark background.

Even the painted sarcophagus at Florence has, on the short sides at least, a dark background.⁴²

I have long entertained the notion that the ἀμυδρά οὕτω δὴ τι τὰ εἶδη τῶν ἰχθύων—σκιὰς μᾶλλον ἢ ἰχθύς ἐκείναις,⁴³ and the ἀμυδρὰ καὶ οὐδὲ ὁλόκληρον εἶδον⁴⁴ in Polygnatus's Nekyia do point to fishes and the image of Tityos in outline, black in the black darkness of Orkos, similar in technique to the black figures that are not rare amongst the coloured designs on black, as the ram of Odysseus⁴⁵ or a Sappho in black dress.⁴⁶

There is nothing in the painting of the krater from Orvieto to speak either for or against the idea that Mikon should thus first have made visible the darkness of Hades, making his figures stand out clear on the black rocks. But here the Theseus krater again comes to our aid. Above the dark waters of the deep the sky is dark, and though the dawn kindles the horizon, the morning star is shining bright. The tripods on the columns in the original were perhaps still flaring as beacons in the darkness of the night. Or does their being burnt out show that daylight is appearing?

Not improbably we should call the dark colour, used here by Mikon, blue, but in the technical language of the fifth century there is, as I hope to show elsewhere, no attempt to distinguish this colour from black, which is the general term for the cool and dark group of tones. In opposition to λευκόν stands μέλας as *light* and *brun* do in the terminology of the Dutch painters in the seventeenth century.

I have only to add here that according to Anaxagoras⁴⁷ the true colour of water is μέλας.

Theseus has been thought to be a solar hero, as well as Herakles, which would be a sufficient reason for his supplanting his model. One would almost be inclined to suppose that either the painter or his authority was aware of this fact; for if the time of the action is fixed at the point of day, the artist wishes to remind us rather of the reappearance of the young hero from the deep waters, than of his hasty leap into them, even as he does not show us the adventurous descent of his riper age into the nether world but his release from the bonds of darkness. If in the hymn of Bacchylides, when Theseus goes down to the palace of the gods, the Nereids, the waves shine like fire and around their crests gold-braided fillets whirl,

⁴² *Annali d. Inst.* 1873, p. 252; *J.H.S.* 1883, Pl. XXXVIII.

⁴³ *Pans.* x. xxviii. 1.

⁴⁴ *Pans.* x. xxix. 3.

⁴⁵ *Gazette Archéologique*, 1888, Pl. XXVIII. s.

Perrot et Chipiez, x. p. 242.

⁴⁶ De Witte, *Descr. d. Coll. d'Ant. con. sacrées à l'hôtel Lambert*, Pl. III. Perrot et Chipiez, x. p. 241.

⁴⁷ Diels, *Porphyrius*, p. 394, Frags. 97, 98.

ἀπο γὰρ ἀγλα-
 ῶν λάμπε γυίων σέλας
 ὥστε πυρός, ἀμφὶ χαίταις
 δὲ χρυσόπλοκοι
 δινεύντο ταινίαι.²¹

he himself comes unwetted out of the sea a wonder to all, and the gifts
 of the gods shine around his limbs.

μὲν' ὀδύρηντες ἐξ ἁλός,
 θαῦμα πάντεσσι λαμ-
 πε δ' ἀμφὶ γυίοις θεῶν δῶρ'.²²

J. SIX.

AMSTERDAM.

²¹ XVII. 101.

²² XVII. 122.



PAINTED SARCOPHAGUS DISCOVERED IN KERAK IN 1900.
The scene represents a painter of *excellent* funeral portraits. (*A.A.S.B.* Pl. XVII.)

ANCIENT DECORATIVE WALL-PAINTING.¹

[PLATES VI-IX.]

I

THE history of ancient decorative wall-painting has yet to be written. The attention of the whole world was attracted by the wonderful discoveries made in Pompeii, and indeed for many years Pompeii stood for ancient decorative wall-painting in general.

That Pompeii so completely overshadowed modern ideas on the evolution of this art is due in great measure to the fact that at Pompeii it had found a wonderful exponent and explorer in the late Professor August Mau. His book dealing with the Pompeian decorative mural painting at once became a classic and influenced profoundly text-books and popular works on the history of ancient art and customs.

Two facts, however, should be borne in mind. First, that the decoration of Pompeian houses illustrates the art of one epoch only—the Hellenistic and the earlier Roman Empire, except for a few examples from a still earlier age, and those not before the third century B.C. Also it should be remembered that this art at Pompeii can be taken as characteristic only of Italy and indeed only of Southern Italy; it does not follow that it developed on the same lines in other regions of the ancient world.

Secondly, that besides Pompeii we have other equally important and complete series of remains of decorative wall-painting, which, like Pompeii,

¹ The text of this article represents a and Historical Society.
lectures delivered to the Oxford Architectural

provide magnificent illustrations of the history of mural decorative painting in the ancient world.

This art is not illustrated everywhere, as in Pompeii, by the mural decorations of beautiful houses; sometimes it is found in the decoration of vaults. But it should be remembered, once and for all, that the scheme and system of decorative wall-painting never changes whether used to embellish the dwellings of the living or the habitations of the dead.

I shall recall the most important series of mural decorations known to us, partly those belonging to the Pompeian period and partly those of an earlier or later period.

I shall not dwell on the long series of mural decorations of Egypt, beginning with the pre-dynastic period and ending with the Saitic epoch. Their history has not been handed down to us by anyone, though it would have been instructive, not merely for the history of decorative art in the East. Neither shall I dwell on the monuments of Babylonia, Elam, Assyria and Persia, or the valuable remains of the Aegean and Mycenaean palaces and vaults on the islands and in Greece. Even up to the present time no proper research has been carried on with regard to these remains. I will only point out the most important series of decorations within the bounds of the Greek and Italic world.

Attention is drawn here first of all to the numerous decorated vaults of Etruria, which illustrate mural painting in Greece from the seventh century B.C. to the third century B.C. If these are carefully studied together with the remains of the decorations of ancient Greek and Italic temples and the valuable series of painted Greek sarcophagi beginning with the Cyprian and Clazomenian and ending with the Etruscan and Sidonian (including Etruscan urns), and if to these is added the series of Greek painted vases, studied from the point of view of a decorative scheme, and the series of Greek painted stelae from Boeotia, Thessaly, Phoenicia and Egypt, then, I consider, it will be easy to outline the history of Greek mural decoration from the archaic to the early Hellenistic period.

In studying the epoch immediately preceding the Pompeian period, we are aided by a magnificent series of decorated Macedonian vaults of the fourth-third centuries B.C., by some tombs of Palestine and by an equally valuable series of Campanian, Apulian, Samnite and Latin tombs, which should be studied together with the decorated vases of that period, found in those districts.

With the third century B.C. begins the series of mural decorations of Pompeian houses. We should not, however, study them, like Mau, only in Pompeii. For the earlier stages of Hellenistic mural painting we have now, besides Pompeii, a fine series of mural decorations of private houses in Delos, as well as in Priene, Thera, Pantikapaion, Olbia, and a number of most interesting decorated vaults belonging to the earlier Hellenistic period in Alexandria and its neighbourhood. This material should be studied together with the history of vase-painting, which, during the Hellenistic period, from being monochrome became polychrome, and together with the

history of painted glass vessels. We are greatly aided in this by various early examples of mosaic on walls and floors.

For the later Hellenistic period there is not so much material. Yet, besides Pompeii, there are the painted grave-stelae noted above, and a certain number of painted vaults mostly belonging to Syria, Phoenicia and Palestine. We must not forget that in this period begins a unique series of remains of decorative mural paintings in houses and vaults belonging to Rome, the then capital of the world. I will only remind the reader of the wall-paintings of the Palatine, and in particular of the latest discoveries made by Boni, the house on the other side of the Tiber, the mural decorations of the Villa Liviae ad gallinas albas, the painted columbaria, etc.

Pompeii was destroyed in 79 A.D. Thus the series of Pompeian decorations abruptly ceases near the end of the first century A.D. A few people have spoken of the development of decorative wall-painting in Greece before Pompeii. But no one has taken interest in or studied the history of decorative painting after Pompeii, in the second and following centuries A.D. Nevertheless, if we wish to understand the system according to which Christian churches in the West and East were decorated, and if we wish to make a careful study of the systems of decoration which prevailed in the Middle Ages and the Renaissance, we should be acquainted with the evolution of decorative mural painting during the whole period of the Roman Empire.

Here we are also aided by possessing most valuable, though not particularly well-known material. I have already spoken of the wonderful remains of mosaic, those stone carpets which covered the floors and walls. Let us remember the valuable series which have been left to us by Italy and the East, and more particularly by the western Roman provinces: Africa, Numidia, Spain, Gaul and Britain.

In addition to the mosaics we have a remarkable series of wall-decorations, the most important of which are to be found in Rome. From the Renaissance period decorated vaults have been opened in Rome one after another. A very few have been preserved; some have been copied, others destroyed without a trace. A great number of decorated houses have also been found: I will only recall to you the 'Domus Aurea' of Nero, the house on the Caelian, and the famous house under SS. Giovanni e Paolo. Only of late has an interest in these monuments been shown: some of them are now being published by the British School in Rome.

These series cannot be treated separately from the wonderful series of catacombs in Rome, Sicily, Naples, Alexandria and on other Christian sites. These have been mostly studied by historians of Christian art whose chief interest lies in the subjects of the paintings. But from the point of view of the history of the art they can only be understood if studied in connexion with the whole series of contemporary mural decorations. Latterly, in the neighbourhood of Rome, Ostia has yielded a most noteworthy series of house decorations, not less interesting indeed, than those found at Pompeii. The oldest belong to the second century A.D., the latest to the fourth century A.D.

The western Roman provinces have less valuable remains, but even here we have some material of primary importance. I may mention the highly interesting work found in Britain, particularly the mural decorations of the houses at Caerwent, the remains at Salonsæ and Pola in Dalmatia and Aquincum on the Danube, many tombs in Albania, Macedonia, Serbia and Bulgaria. Important remains of stucco-paintings in some Gallic villas and houses in North Africa, a beautiful painted tomb near Tripoli, etc.

There are not as many remains in the East, but even here we find some particularly valuable material. Few people know how many remains of Roman decorative painting there are in Egypt. A series of vaults near Akhmim (Panopolis) belonging to the second-third centuries A.D., decorated edifices and tombs in Alexandria, and the important paintings on one of the walls of a temple in Luxor—these are the fragments I have personally seen in Egypt.

Moreover, we have a whole series of painted vaults from Palmyra, another series in Phœnicia and Palestine, fragments of mural decoration from a large house in Kos and the decorations of the former palace of Attalus in Pergamon, etc.

With all these facts it seems possible to attempt the task of reconstructing the history of decorative wall-painting in the period of the Roman Empire.

II

Amid all these examples of our art, a special place is occupied by the decorations found in the Greek towns of South Russia, which were first collected and arranged by me. There are not many, nor are they particularly important considered artistically. They belong on the whole to provincial art. But they are important to us for two reasons. In the first place, they make a complete series of monuments from the fourth century B.C. to the fourth century A.D.—in each century are several specimens of well-preserved vaults and these can always be dated. (The evidence for these dates has been collected by me and is published in my book: I cannot dwell on them in detail here.) In the second place because these monuments depict the evolution of mural decorative painting in the East, where we have so few remains of the Roman period, and where Greek tradition and Eastern art unite. Studying these monuments, we are able not only to recognise the Egyptian and Syrian influences, but also the Iranian, the important significance of which has only lately been realised.

In my short account I cannot dwell on all the important questions arising from the study of all the above-mentioned facts and material. Let me deal only with the question concerning the evolution of the general scheme of mural decorative painting of the Greek and Roman period.

The most ancient system of mural decoration of small houses and of vaults in Greece (not in the Aegean world, where different principles were employed) was based on an elementary and simple idea. This idea is prompted by the structural system of the wall as such. The oldest walls

were not built of stone but of unbaked brick: large stone blocks were only used for the base. To join the base and the brick-wall a course of wood, stone or twigs was required; a similar course was required at the top of the wall for the purpose of fixing the roof. This construction divides the wall into four parts: the base, the intermediate portion, the central part of the wall and the cornice.

The unbaked brick and rough stones were brittle and shapeless; they were therefore covered with plaster, which from the most ancient times was painted. Usually the central part of the wall was painted red. The cornice and intermediate portion were the most suitable parts of the wall for painting and embellishing with geometrical and other designs. The base was either entirely painted over in a colour differing from the colour of the central wall-space or painted to imitate a base built of stone slabs.

This oldest scheme of wall-decoration was greatly influenced by buildings built entirely of squared stones, which fully retained the characteristics of the more ancient wall of unbaked brick: the base, the intermediate portion, the central part and the cornice.

The system of wall painting traced above, which may be called the 'structural system,' is splendidly illustrated in some decorated vaults found in South Russia belonging to the fourth and third centuries B.C., in one of Kerch, one on Vassurin's hill (on the Taman peninsula) and another near Anapa on the Black Sea (anc. Gorgippia). The painted vault of Kerch (see Plate VI 1; comp. *A.d.p.S.R.* p. 70 foll., Pls. XXVI, XXVII 5 and XXVIII) belongs to the fourth century B.C. The decorative system, however, reproduced in this vault illustrates a very primitive decorative scheme. There is no doubt that the decorative wall, though built up of stones, is decorated as if it were constructed of unbaked bricks. The base and the middle part of the wall painted in plain colours (red and yellow), the intermediate part reproducing a wooden course, the wooden cornice with nails on which sepulchral implements are hung, demonstrate that the decorator operated with a very old and primitive decorative scheme.

More advanced is the decorative scheme of the painted vault on Vassurin's hill (see *A.d.p.S.R.* p. 39 foll., Pls. XI-XXV and Figs. 6-10). The base here imitates square stone courses, the intermediate part and the cornice are richly adorned with painted ornaments and reproduce perhaps stuccoed and painted stone courses. In examining the decorations of the vault on Vassurin's hill it should be remembered that its architectural prototype is not a building covered with a roof, but only one surrounded by walls: hence the balusters on the walls and the birds perched on them. The carpet decorating the ceiling of this vault is often met with in the decorations of ceilings: we also find it in some of the Alexandrian vaults of the third century B.C. and later in the decorations of some of the rooms in the Flavian palace on the Palatine. The fact that ceilings and walls were decorated with carpets leads one to suppose that the ceilings were often upholstered with stuff or with carpets.

The vault of Anapa (see *A.d.p.S.R.* 83 foll., Pls. XXVII 1 and

XXIX.-XXXI) shows the great influence on wall-painting of vaults and houses built of huge squared stones.

A stone building did not require covering with stucco. It was sufficient, as in the large Greek temples, to paint the capitals of the columns or the frieze and cornice. It was also customary to decorate the coffers of the ceiling. All this can be observed in the decorations of the vault of the Tumulus Bolshaja Blisnitsa, belonging to the fourth century B.C. (see *A.d.p.S.R.* 10 foll, Pls. IV.-XI, Figs. 1-5). The head of Kore in the central space of the step-vaulted ceiling (Pl. VII. 1 and Fig. 1) recalls similar heads of gods and goddesses of the nether world to be found in many of the vaults of Asia Minor and Italy of the same period; similar heads are often



FIG. 1.—VIEW OF THE PAINTED VAULT IN THE TUMULUS BOLSHAJA
BLISNITZA (TANAN).
(Bostovitch, *A.d.p.S.R.* Pl. VI. 2.)

used as decorations of coffers of ordinary ceilings. Later they appear in the centre of semi-cylindrical vaults.

This most ancient system of mural painting, dating back, then, to ancient Egypt and lasting almost unchanged to the fourth and third centuries B.C., led to important artistic creations. The central undecorated wall-space became the natural background for monumental decoration in the form of figure subjects, that is the so-called Greek 'megalography.' Wonderful paintings once adorned this part of the wall in the 'Stoa Poikile.' Splendid examples of walls thus decorated are to be found in many Etruscan and Samnite tombs and later in the Villa Ippia recently discovered near Pompeii.

Along with this another idea begins to develop and prevail in the early

Hellenistic time. The walls of the Hellenistic palaces of Asia Minor and Egypt were mostly built of brick and were often covered with thin slabs of different coloured marble instead of stucco, but retaining all the structural parts of a Greek wall built of squared stone. This resulted in a rich harmony of colours, familiar to us not in the originals, but in innumerable copies on the walls of bourgeois houses and vaults throughout the Hellenistic world—in Delos, Priene, Thera, Pompeii, Alexandria, Pantikapaion and Olbia. This system of wall-decoration is generally called the first Pompeian or the incrustation style. I cannot adopt this terminology, first because the style is not confined to Pompeii, secondly because incrustation is the inseting of marble of one colour into marble slabs of a different colour, and that is not the case here. Real incrustation will be observed later (p. 152).

The so-called first Pompeian style does not differ in principle from the old Greek structural style; it is only finer and richer in colour and more elaborate in details. We may designate it as the Hellenistic structural style.

It is interesting to note, however, that the so-called first Pompeian style is not the same everywhere: three varieties can be clearly distinguished—the Aléxandrian, that of Asia Minor, to which the South Russian decorations belong (see Pl. VI 2; comp. *A.d.p.S.R.* 112 foll., Pl. XXVII 2-4 and XXXVII-XLIV, Figs. 23-26) and the Italian. The Asia Minor style is richer in elaborate details and has more colour, whereas the Italian is more strictly architectural.

The Italian and especially Pompeian wall-paintings developed not only polychrome effects, but also architectural elements. In addition to the horizontal divisions of the wall, vertical divisions are indicated everywhere. From top to bottom, from the dado to the cornice, the wall is divided by columns, pilasters and half-columns; the frames of doors, windows and niches are richly embellished and painted; walls with two lights, as in the Odeon of Pericles, are reproduced in the mural decorations.

All these elements, which strongly prevail in Italy in the first Pompeian style, gradually develop into the so-called second Pompeian style, and later into the third and fourth Pompeian styles, whose further development can be observed in Italy and the western provinces. I would call all these styles architectural. One of the most striking features of the architectural style is the close imitation in wall-decorations of the decorations of the theatre stage. This imitation is as characteristic of the earlier phases of the architectural style (the second Pompeian style) as of the later development (the fourth Pompeian style).

In considering the hotly debated question of the provenance of this architectural style it is most important to state that I know of no examples in the East or in South Russia, though many vaults belonging to this period are to be found in the South of Russia. Neither has Egypt produced any conspicuous examples, whereas Rome, Italy and the West are rich in remains of that style. I would therefore feel inclined to agree with the opinion of those ancient authors, who saw the development of this style and consider Italy its place of origin.

In the East a different development may be observed. In the first and second centuries A.D. two different styles made their appearance, both of no less importance in the further development of decorative art. At first, during the later Hellenistic period, simple degeneration and simplification of the structural style begins: it is in fact the same process as that suffered by the architectural style in Italy and the western provinces (see *Adp.S.R.* 136 foll., chs. xi.-xvi.; I called this system of decoration pseudo-isodome or late structural).

But afterwards, two peculiar styles emerge: the floral or carpet style, and the incrustation style.

The floral style is very old. It originates in the tent of nomadic tribes, which was entirely hung with carpets. But the form in which it appears in



FIG. 2.—FRONT PART AND FRONT DOOR OF THE VAULT DISCOVERED IN KERCH IN 1895.
(The two figures to the right and to the left of the door are defined by inscriptions as Hermes and Kalyssa, the *dei phrygienses*, *Adp.S.R.* PL. LVI.)

South Russia is the product of late Hellenism. It may be described as follows: the framework of architectural structure and divisions remains the same: dado, central and upper part of the wall: all these parts of the wall, however, are used as background for decoration. In some decorations of Pompeii, Cyrene and Alexandria, the leading idea is that of a woven carpet covering the wall. In South Russia the wall is covered with branches, flowers and garlands partly taken from nature and partly conventionalised. They are strewn in full disorder without system on the walls and ceilings, and are often found in conjunction with figure subjects, which at this period are found in the central space and in the lunettes (see Fig. 2, the earliest example of this style: the vault discovered at Kertch in 1895; the ceiling

with the head of Demeter is reproduced on Pl. VII 2, comp. *A.d.p.S.R.* 199 foll., Pls. LVI-LXII, Figs. 35-47; other examples of the same style in Kertch are the vault of 1873, see *A.d.p.S.R.* 227 foll., Pls. LXIII-LXV, Figs. 49-52, and the vault of Sorakos, *ibid.* 244 foll., Pl. LXV, 4, Fig. 53).

I cannot here trace the full development of this style, but I may say that it is not confined to the South of Russia. It is found in some houses in Pompeii, in the vaults of Rome, Tripoli and Palmyra, and in the palace of the Attalids in Pergamon. Its influence is strongly felt in some decorations of the western provinces of Rome: I find traces of it in Hellenistic ceramics, and in many Hellenistic and Roman mosaics, but it is probably older than Hellenism and originates in the East. For the future no student of decorative art can afford to neglect it.

The incrustation style has a still greater importance. The history of its origin was outlined to us by Vitruvius and Pliny. They consider the palace of Mausolus in Caria the first example of it in the Greek world. But it dates even further back. Its birthplace is ancient Mesopotamia and Iran with their buildings of unbaked brick and their wealth of different coloured stone. The principle of the style is as follows: the same fundamental system of dividing the wall into three parts is retained, and the whole or some parts of the wall are covered with slabs of different coloured marbles, not with the intent of reproducing or outlining the structural character of the wall, but of achieving a rich polychromy. Its leading idea is to obtain an effect of mosaic, 'marmoribus pingere.' Marble slabs of one colour are 'incrusted' or inlaid with 'crustae' of another colour, forming geometrical ornament, and separate figures or whole scenes.

The same effect is produced in Elam, Babylonia and Persia, by using different coloured tiles. During the Roman period decorators refrained from reproducing human figures and animals on walls decorated on this system and contented themselves with geometrical ornament. Their treatment of floors, however, as is shown by numerous examples found in Rome, is all the more unrestricted, and by means of incrustation, human beings, animals, etc., are represented.

A splendid illustration of this form of art is given by a vault opened by Stassov in Pantikapaion (see Pl. VIII., one of the walls, and Pl. IX., the ceiling), and by a vault in the same place, which I have discovered and described (*A.d.p.S.R.* p. 261 foll., Pls. LXVI-LXX.)

Characteristic for Kertch is the fact that the incrustation style was mostly combined with the floral and with representations of figured scenes in the upper part of the wall. In these cases the lower part of the wall was covered with decoration imitating marble incrustation, the upper with figure subjects and strewn flowers and garlands (see Pl. VIII.). The same combination may be observed on the ceilings (see Pl. IX.); the central part is covered with flowers, birds and garlands; the parts of the ceiling above the funeral beds, with coffers inlaid with coloured marble. The description of vaults decorated in the incrustation style and an analysis of the style as such can be found in *A.d.p.S.R.* 260 foll., chs. xxiv.-xxviii. (pure

incrustation style) and p. 283 foll., chs. xxix.-xxxii. (mixed incrustation and floral style).

It is interesting to note that this style can be observed in the later decorations of Pompeii.

The incrustation style had a promising future. Every Byzantine church, many relics of the early medieval ages provide brilliant examples of the further development—extending even to the present day.

The floral and incrustation style in South Russia reached their climax in the second and the beginning of the third century A.D. In the third century they are already declining. Rich colour and form disappear; the floral and incrustation style adopt geometrical form, and everything is based on line and contour.

Christianity established in the Chersonese during the third century A.D. gives rise to the rebirth of decorative wall-painting strongly influenced by Syria and Palestine. The determination of the origin of this new development is a difficult and complicated question. A discussion of it would be too lengthy for me to enter on here (see *A.d.p.S.R.*, p. 439 foll., chs. xlvii.-lviii., Pls. CIII-CX.).

I have now given a brief review of the development of decorative wall-painting in the East and partly in the West, in so far as this development is shown by the monuments found in South Russia. The universal evolution is more complicated and more detailed, but the essential steps of evolution have all left their trace in South Russia, and from their observation some fresh idea can be obtained of the general development of mural decorative art in Greece and the Roman Empire.

NOTES AND REFERENCES.

To Part I.

The article printed above reproduces in general outlines the results at which I arrived in my book *Ancient Decorative Painting in the South of Russia*. S. Petersburg, 1914, vol. i. (text), vol. ii. (plates), (quoted as *A.d.p.S.R.*). It is impossible to give in a few pages the whole content of a big work of about 600 pages and 112 plates dealing with difficult and unexplored material. But it would be perhaps useful to trace the main outlines of the general evolution of ancient decorative painting as resulting from the minute research carried out in my above-mentioned book.

In these few additional notes appended to my article I cannot give all the references and quotations contained in my book. I should like only to illustrate certain points in my article by some references partly borrowed from my above-mentioned book, partly new. My aim is to give to my reader the possibility of controlling my own statements and to guide him through the scattered and unsufficiently studied materials. I do not mention the

older publications if I am able to refer to a recent work or article containing a more or less good bibliography of the subject.

The standard work on *Pompeian Decorative Painting* is A. Mau, *Geschichte der decorativen Wandmalerei in Pompeii*, Berlin, 1882, with atlas of coloured and uncoloured plates. The new works about the subject deal with some points of detail and are indicated in the introduction to my *A.d.p.S.R.* (Valuable remarks about the origin of the Pompeian system may be found in R. Pagenstecher, 'Alexandrinische Studien' ii., *Sitzb. der Heid. Ak.*, Ph.-Hist. Kl. 1917, 1 foll.) No one has tried to illustrate post-Pompeian decorative painting in the Roman world, as no one has attempted to give the outlines of evolution before Pompeii. I have not to deal here with the question of the composition and the originals of individual Pompeian pictures; see the last works on this subject: Lippold, *Jahrb. d. d. Arch. Inst.* xxix. (1914), 174 foll.; F. Matz, *Ath. Mitth.* xxxix. (1914), 65 foll.

Etruria.—The latest and best work on the painted tombs of Etruria is F. Weege, *Etruskische Gräber mit Gemälden in Corneto*, *Jahrb. d. d. Arch. Inst.* 1916 (xxxi.), 103 foll. but it deals only with Corneto; comp. Ducati, *Atene e Roma*, 1914, 129 foll. and Galli, *Monum. antich. xxiv.* (1917), 1 foll. With the Etruscan tombs we have to compare the beautiful sarcophagi from Gela in Sicily of the fifth century B.C., stuccoed and painted inside like a sepulchral room, see Orsi, *Mon. ant.* xvii. (1907), 384, Figs. 284-287 and Tav. XLVI. Of later date (fourth to third century B.C.) are the remains of painted stuccoes from a dwelling house in Gela (Orsi, *ibid.* 379, Fig. 281). The remains in Greece itself are scarce; note a tomb from Eretria in Euboea, *Ath. Mitth.* 1901, 339, Fig. 2, and another tomb from Aegina, Ross, *Arch. Aufs.* Pl. III., cf. *Ath. Mitth.* 1885, 158.

Macedonia and Thracia.—The beautiful painted vaults in Macedonia and Thracia belonging to the fourth-third centuries B.C. give the best analogies to the painted tombs of early date in South Russia. Like them they are covered by a big tumulus and belong apparently to Macedonian and Thracian kings and princes. A few of them were excavated, to wit, some tumuli near Pella, Pydna and Palatitza, see Delaunay, 'Berceau de puissance macédonienne,' 76 (*Arch. de mission* sc. 1858); Heuzey et Daumet, *Mission en Macédoine*, 226 foll.; 247 foll. and 251. A splendid tomb was discovered by K. E. Kinch in Macedonian Thracia, see Kinch, *Beretning om en Archæologiske Reise i Makedonien*, København, 1893: *A.d.p.S.R.* 313, Fig. 61, compare the newly discovered vault near Salonika with funeral beds and a splendid door, Maccidy Bey, *Jahrb. d. d. Arch. Inst.* 1910, 210.

South Italy.—F. Weege, 'Oskische Grabmalerei,' *Jahrb. d. d. Arch. Inst.* 1909 (xxiv.), 99 foll.; R. Pagenstecher, 'Grabgemälde aus Gnathia,' *Röm. Mitth.* 1912, 101 foll. (gives valuable evidence on the Apulian graves); Giabroni, *Mon. d. Linc.* xx. (1910), 1 foll. (vault of Teano). Compare H. Nachod, *Röm. Mitth.* 1914 (xxix.), 260 foll. and some articles on various badly excavated and thoroughly forgotten tombs in the periodicals *Apulia* and *Neapolis* (eg. *Apulia* ii. 159; iii. 97; *Neapolis* i. 104, etc.).

Palestine.—To the early Hellenistic period belongs the splendid painted tomb of Marissa, see *Palestine Exploration Fund, Painted Tombs in the Necropolis of Marissa* by J. P. Peters and M. Thiersch, London, 1905; cf. Macalister, *Addenda ibid.* and Vincent, *Rev. biblique*, 1906; also Thiersch, *Arch. Anz.* 1908, 405 foll.

The splendid representatives of the oriental branch of the so-called first Pompeian style from *Delos* are now decently published and carefully studied by M. Bulard, 'Peintures et mosaïques de Delos,' *Mon. et Mém. Piot* xiv, (1908); less important are the remains in Priene, Magnesia on Maeander and Thera, see Wiegand and Schrader, *Priene*, p. 308 foll.; Hiller von Gaertringen, *Thera* iii, 145; 148 and Pl. 4; 162 and 164 Pls 1-2 and Fig. 154, comp. p. 169 (some of the remains on Thera belong to Roman times); *Magnesia am Maeander*, p. 138, Fig. 149, 150; on Olbia and Pantikapaion, see further above.

Extremely rich and quite peculiar is the series of painted tombs of the early Hellenistic period discovered in *Alexandria*. It is a pity that the series was never published as a whole; some tombs, like the beautiful tombs near the ancient Pharos, remain practically unpublished, see M. Thiersch, *Zwei antike Grabanlagen bei Alexandria*, Berlin, 1904 (the tomb of Sidi-Gaber and that in the garden Antoniadis); the painted vault of Souk-el-Wardian, see Breccia, *Musée égyptien* ii, (1904), 63 foll.; a description of the paintings in the tombs of Pharos, Botti, *Bull. de la Soc. Arch. d'Alexandrie*, 1902 (No. 4), 13 foll. compare *A.d.p.S.R.*, p. 63, fig. 12, and Pl. XXV, 2. The new and less important monuments are published in the periodical *Rapport sur le marche du Service du Musée* of the municipality of Alexandria.

We have to compare the Alexandrian examples with those from South Italy, e.g. *Naples, Mon. ant. pubbl. dell' Accademia dei Lincei*, viii, 221 foll., compare Gabrieli, 'Tombe ellenistiche di S. Maria Nuova in Napoli,' *Röm. Myth.* 1912, 148 foll.

Valuable information about the style, ornaments, colours and the decorative scheme of Hellenistic wall-painting is supplied by painted clay and glass vases of the same period. The latest and most important works on the clay vases of the Hellenistic period are: E. Pottier, 'Vases hellénistiques à fond blanc,' *Mon. Piot* xx, (1913); G. Leroux, *Lagynos. Recherches sur la céramique et l'art ornemental hellénistiques*, Paris, 1913; Sieglin-Pagenstecher, *Beschreibung der griech.-ägypt. Sammlung Ernst von Sieglin*, Leipzig, 1913, *Expedition E. v. Sieglin*, ii, 3; Picard, 'La fin de la céramique peinte en Grande-Grece,' *Bull. de corr. hell.* 1911; E. Breccia, *Catal. gén. des ant. ég. du Musée d'Alexandrie. La nécropole de Sciattî*, Le Caire, 1912; compare *Musée ég.* iii, 13 foll. (*La ghirlandomania alexandrina*); J. Six, *Polychrome Malereien von hellenistischen Hydrien aus der Nekropole von Hatra* in Herrmann, *Denkm. der Malerei des Alt.* 15, K. V. Trever, *Olbian Polychrome amphora* (in Russian), *Materialy po arkhologii Rossi*, N. 30 (Petrograd, 1918). The painted glass-vessels are illustrated by myself: 'Painted Glass Vases of the Late Hellenistic Times and

the History of Decorative Painting" (in Russian), *Bull. de la Comm. Imp. Arch.* 1914, compare Morin-Jean, *Rev. arch.* 1917, 319 foll. (abstract of my article, not without defects and misunderstandings).

Of great importance are the *painted grave-stelae* of the Greek and early Hellenistic period found chiefly in Egypt, Phoenicia (Sidon) and Thessaly. We have no general publication of the painted stelae of Alexandria. Most of them are published by Breccia in his accounts of the excavations in the necropolis of Alexandria—Sciatti, Ibrahimieh, Gabbari, etc., see the above mentioned book *La necropoli di Sciatti*, compare *Rapport sur la marche du service*, and *Bulletin arch. d'Alexandrie*, also the article of A. Reinach, 'Les Galates dans l'art Alexandrin,' *Mon. Piot*, xviii, 37 foll. and my article in *Monuments du Musée Alexandre III. à Moscou* (Moscow, 1912), i-ii, 69 foll. The curious Sidonian stelae now chiefly in the Museum of Constantinople were collected by Lammens, *Rev. Arch.* 1898 (33), 109; Perdrizet, *ibid.* 1899, 42 foll. and 1904, 234 foll. The stelae of Pegasus-Demetrias in Thessaly were published by A. S. Arvanitopoulos, *Θεσσαλικά Μνημεία*, 1909; compare A. Reinach, 'Les nouvelles stèles de Demetrias,' *Rev. ép.* ii, 137 foll.; O. Rodenwaldt, *Ath. Mitth.* 1910, 118 foll. and A. Walton, 'Painted marbles from Thessaly,' in *Art and Archaeology*, iv, (1916), 47 foll.

Late Hellenistic (?) Palestinian tombs were published by Bliss and Macalister, *Excavations in Palestine during the Year 1898*, p. 198 foll. and Pl. 92, Figs. 3 and 5 (Tell el Judeideh) and by Bliss and Dickie, *Excavations at Jerusalem, 1894-1897*, London, 1898, 244 foll. (two coloured plates). The dates of both are uncertain.

The late Hellenistic wall-paintings of *Rome* are to be found in the above mentioned book of A. Mau. The new discoveries in the foundations of the Flavian house on the Palatine are not published yet. The wall-paintings of *Rome* belonging to the time after the destruction of Pompeii are partly mentioned by Mau. But the series is enormously rich and few monuments are duly published. I shall mention first of all the new publication of the remains of wall-paintings in the domus aurea of Nero by F. Weege, 'Das goldene Haus des Nero,' *Jahrb. d. d. Arch. Inst.* 1913 (xxviii.), 127 foll. and some coloured plates in the *Antike Denkmäler*, as examples of a good publication of one of the most beautiful works of ancient decorative painting, completely destroyed after its first discovery.

I cannot enumerate all the monuments containing wall-paintings, partly published, partly unpublished, which I brought together for the second volume of my *A.d.p.S.R.*, the list would be too long. I shall mention only that the interest in these valuable remains, which seemed to be dead in the nineteenth century, awakened again in the twentieth century. Some scholars are busy in republishing certain valuable frescoes, badly and incorrectly published in the seventeenth and eighteenth centuries, partly from the extant originals, partly from ancient unpublished coloured drawings. I may remind the reader of the splendid publication of the pictures of Rome and Ostia preserved in the Vatican by Nogara, of many publications of

ancient drawings made after ancient tombs and buildings discovered in Rome in the seventeenth and eighteenth centuries; see R. Engelmann, *Antike Bilder aus Römischen Handschriften*, Berlin, 1909, and T. Ashby in the *Papers of the British School at Rome*, vii. (1914), 1 foll. and viii. (1916), 91 foll., compare A. Michaelis, *Jahrb. d. d. Arch. Inst.* xxv. (1910), 101 foll.; *A.d.p.S.R.* p. 371 foll. and G. Rodenwaldt, *Gemälde aus dem Grabe der Nasonier*, *Röm. Myth.* 32, 1 foll., and of many valuable papers by T. Ashby and Mrs. Strong giving good reproductions of forgotten or insufficiently known representatives of Roman wall-paintings; see Ashby, 'The Columbarium of Pomponius Hylas,' *Papers of the British School at Rome*, v. (1910), 463 foll.; Mrs. A. Strong, 'Ancient Wall-Paintings in Rome. I. The Palatine,' *ibid.* vii. (1914), 114 foll.; 'II. The House in the via de' Cerchi,' *ibid.* viii. (1916), 91 foll. Compare, on the Caelian house, Gatti, *Bull. Com.* 1902, 147 foll. But I must say that the work of republishing unduly forgotten remains is only at its beginning. One must not forget how many valuable remains were discovered during the rebuilding and building of modern Rome in the eighteen-seventies. Meanwhile new monuments of the first importance come to light and await an adequate publication. I mentioned the paintings of the Palatine; now some beautiful Columbaria have been discovered under S. Sebastiano on the Via Appia, see Profumo, *St. Romani*, ii. (1914), 417 foll.; Marrocchi, *Bull. Com.* 1916, 249 foll.; comp. *Cronaca delle belle arti* ix. (1917), 40 foll. and Spuro in *Neapolis* i. (1915), 334 foll.; and a building near Porta Maggiore is described as containing splendid decorations, see *Cron. d. belle arti*, ix. (1917), 41 and van Buren, *The Year's Work in Class. Phil.* xii. (1917), 4 foll. See also E. Katterfeld, *Röm. Myth.* 1913, 28 foll. The wall-paintings in Ostia are described and studied by F. Fornari in *Studi Romani*, i. (1913), 305 foll.

To enumerate all the remains of ancient decorative wall-painting in the western provinces of the Roman Empire would be a hard and long task. I shall give but few references, more to illustrate than to exhaust the subject.

In Gaul and Belgium we have many remains of Roman decorative paintings found partly in Gallo-Roman towns, partly in villas. The best collection of these fragments may be seen in the Museum of St. Germain. Interest in these remains is now awakened among French scholars; new finds are sometimes well reproduced, (see e.g. E. Chanel, 'Peintures murales de la villa gallo-romaine de Periguot hameau d'Izernore (Ain),' *Bull. arch. du com. d. tr. hist.* 1909, 1, 3 foll. Pls. L-IV.); old drawings are republished (see *Rev. arch.* 1913 (xxi.), 195—drawings of Langlois from some frescoes of Lillebeare, compare Gaillard, *Mém. de la soc. d. ant. de Normandie*, 1853, 50 foll.). A full list of the monuments would be of great importance.

The same may be said of the numerous remains in Britain scattered in many provincial museums and published in provincial publications. The best were discovered at Caerwent and partly published in the *Account of the Excavations* (in *Archaeologia*). I give no references, because only a full list would be of use. My materials are still too fragmentary.

Roman Africa, so rich in mosaics, has supplied us with some important remains of decorative mural painting also. To illustrate this I reproduce a short list of publications sent to me in 1912 at my request by A. Merlin. M. Merlin did not pretend to make a full statement, but the list as it is is very instructive. I must point out, that Merlin deals only with Africa proconsularis, excluding Numidia and Mauretania. To his enumeration I can append only one monument—the beautiful painted tomb of Guigrieh near Leptis Magna, see *C.R. de l'Acad.* 1903, 358 and 360, *l'Arte*, 1903, 97; *Nuovo Bull. di Archeologia Crist.* 1903, 286.

The list runs as follows:

Gipthia: Gauckler, *Compte rendu de la Marche du Service des Antiquités en 1902*, p. 25; Merlin, *Bull. archéol. du Comité*, janvier, 1912. *Thima*: Massigli, *Cat. du Musée de Sfax*, p. 14; Fortica et Malahar, *Bull. archéol. du Comité*, 1910, p. 88 et suiv., notamment, p. 92; Merlin, *Bull. archéol. du Comité*, mai, 1912. *El-Djem*: Merlin, *Bull. archéol. du Comité*, 1910, p. ccix., 1911, p. clxiii. *Sousse*: Lacombe et Hannezo, *Bull. archéol. du Comité*, 1889, p. 110 et suiv., en particulier, p. 116 et Pl. II.; S. Reinach, *Bull. archéol. du Comité*, 1892, p. 416 et suiv., Pls. XXIX–XXX–XXXI; Gauckler, Gouvet et Hannezo, *Musées de Sousse*, p. 45. *Oudna*: *Monuments Piot*, iii, 1897, pp. 217–218: 'lourdes rosaces géométriques, bariolées de couleurs criardes, formant un réseau ininterrompu sur fond blanc.' Voir aussi *Catal. Musée Alaoui*, Suppl., p. 39, Nos. 83 et suiv.

I add a few scattered notes on other western provinces just to show how large and rich the material is.

Trier: F. Hettner, *Illustr. Führer durch das Provinzialmuseum*, 95 (painted tomb); *Dalmatia* (Salonae): *Bull. Dalm.* 1900, 201, Pl. IV.; 1901, 110 foll. and Pl. XI.; compare 1892, 159 (painted tombs of early Christian time); *Albania*: *Archaeologia*, 1849, p. 69 foll. (painted tomb); *Macedonia*: *Mé. de l'école fr. de Rome*, 1905, 92 foll. and Pl. II.; *Aquincum* (on the Danube), Hungary: many remains of wall-paintings of houses are published in the Hungarian periodical, *Budapest Regiségi*, vr. i–ix.; *Serbia and Bulgaria*: I published recently two painted tombs from Viminacium and Varna in *Zapiski Russkago arch. Obščestva* (Depart. of Classical and Byz. Arch.) viii.; more important is the tomb of Brestovik (near Belgrad), published by Vasić and Valtrović in *Starinar*, 1900, 128 foll.

As regards *Egypt*, but few monuments have been published. In Alexandria some frescoes from Gabbari have been studied by Thiersch, 'Zwei Gräber der röm. Kaiserzeit in Gabbari,' *Bull. de la Soc. arch. d'Alex.* 1900, 3, cp. Botti, *ibid.* No. 2, 52 foll.; compare Edgar, *Musée ég.* ii 49 foll., and Rubensohn, *Jahrb. d. d. Arch. Inst.* 1905, 17; but the more important decorated walls in some rooms of the big tomb of Kom-es-Shukafa still remain unpublished. Nobody has tried to reproduce and to save the most important series of tombs near *Akhmim* (Panopolis). One of them was described by Rubensohn, *Arch. Anz.* 1906, 130; two were photographed and one published by myself (*A.Z.P.S.R.* p. 494, Fig. 92, 93). The wall-decorations in Luxor remain unpublished. To much later times belong the

decorative paintings of Bahwit and Bahawat: see Cledat, 'Le monastère et la nécropole de Baouit,' *Mém. publiés par les membres de l'Inst. fr. d'arch. or.* xiii. (1904); and von Bock and Smirnov, *Matériaux pour servir l'archéologie de l'Égypte chrétienne* (in Russian), St. Petersburg, 1901.

Palmyra: Pharmakovsky, *Bulletin de l'Institut russe à Constantinople*, viii. 3; Strzygowski, *Orient oder Rom*, 12 foll.; Cumont, *Rev. de l'hist. d. rel.* 62 (1910), 142 foll.

Phoenicia and Palestine: see Renan, *Mission en Phénicie*, Paris, 1864, 209, 395, 408, 411, 661; F. Dietrich, *Zwei sidonische Inschriften* etc., Marburg, 1855, 8; Vogné, *Fragment d'un Journal de voyage en Orient*, 27 foll.; Schick, *Pal. Expl. F. Quart. Stat.* 1887, 51 (newly discovered rock-hewn tombs at Kolonieh).

Pergamon: Schazmann, *Ath. Mitth.*, 1908 (33), 437. The house of Kos is still unpublished.

To Part II.

The leading ideas in my account of the earlier history of wall-painting are (1) the close connexion of the mural painting with the structure of the wall; (2) the independence of the Greek evolution from every foreign influence, and the direct evolution of the so-called first Pompeian style from the purely Greek structural decorative scheme. The problem of the origin of the first Pompeian style is hotly debated. My point of view remains very near to the point of view of Doerpfeld, though I arrived at it quite independently; see Doerpfeld, 'Zu den Bauwerken Athens,' *Ath. Mitth.* 1911 (36), p. 52 foll. (deals with the Pinakothek on the Akropolis of Athens), and 'Gesimse unter Wandmalereien' (*ibid.* p. 86 foll.; deals with the halls of the Athena-sanctuary in Pergamon). I cannot see what influence Alexandria had on the first Pompeian style, nor can I acknowledge that the palace of Mausolus was decorated in the scheme of the first Pompeian style. The palace and its oriental prototypes were parents of the true incrustation style. I shall have to deal with it later. On the question of the origin of the first Pompeian style, see e.g. Th. Schreiber, *Die Brunnenreliefs*, pp. 13 and 48; *Jahrb. d. d. Arch. Inst.* 1896, 82; H. Thiersch, *Zwei antike Grabanlagen*, 12; Pfuhl, *Jahrb. d. d. Arch. Inst.* 1905, 54; Wace, *Ann. of the Br. School at Athens*, ix. 232 foll.; R. Pagenstecher, *Sitzb. der Heid. Akad. Phil.-Hist. Klasse*, 1917, 12.

More complex is the question of the origin of the second style—the architectural style, as I call it, to differentiate it from the first, or structural style. It is commonly accepted, on the ground of certain literary evidence and of monuments like the façades of the tombs at Petra in Arabia, that the architectural style originated in Asia Minor. The most important text, however—Vitruvius, vii. 5, 5, dealing with Apaturius from Alabanda—does not mention the house-decorations, but pictures to adorn a theatre stage. At the same time it must be taken into consideration that Apaturius lived not earlier than in the first century B.C., and was perhaps a contemporary of

Vitruvius. It is possible that he introduced into Asia Minor a foreign fashion coming from Italy. It is necessary to remember that he encountered opposition in Tralles and was obliged to substitute for his fantastic picture a more real one. Quite indecisive are the other texts, quoted by the defenders of the Asia Minor theory (e.g. Studniczka, *Tropaeum Traiani*, 67, etc.), like the information on Agatharchos and his work in the house of Alcibiades (Plut. *Per.* 13; *de amic. mult.* 5; Vitruv. vii. praef. 11). On the other side we have no monuments of Hellenistic times in Greece and Asia Minor showing a decoration of this style. There is no doubt that the tombs of Petra belong to about the time of Hadrian, and to the same time or a little earlier belong other monuments of the same kind. Convincing, on the other hand, is the negative evidence. None of the numerous wall-paintings of houses in Delos, Priene, Thera, Magnesia, Pantikapaion, Olbia, which are partly, as in Delos, comparatively late (second-first century B.C.), no tomb in the East, in Egypt and in South Russia is decorated in the architectural style. On the other side, Italy and the western provinces are full of examples of this style belonging partly to the first century B.C. In view of this negative and positive evidence, it would be unmethodical to give no credence to certain authoritative statements of Roman authors, who affirm that the architectural style was born in Rome and was one of the forms of the Italian renaissance of the later Hellenistic time. This development was prepared by the peculiar form of the Italian so-called first Pompeian style. I have already mentioned the predominance in this style in Italy of vertical divisions and the tendency to fill upper parts of the wall with windows, niches, etc., or to give the impression of an opening of the wall with the view outside. Like the vertical divisions of the wall, it is an imitation of real architecture in the type of the Odeon of Pericles: see Plut. *Per.* 13; Vitruv. v. 9, 1; Benndorf, *Das Monument von Adamklissi* 144. The tendency to vertical divisions is not peculiar to Italy and to Rome. The real Greek architecture cultivated it during the whole Hellenistic age. New is the rich development both in real architecture and painted imitations. And this is just the peculiarity of Italy. One must not forget that the second and first century B.C. was a time of economic decay of the East and at the same time of strong development of wealth and wealthier classes in Italy. Italy was filled with Greek artists, well paid and employed to adorn the town palaces and villas of Roman wealthy citizens. No wonder if the new leading tendencies in art were developed not in Greece, Asia Minor, and Egypt, but in Rome, Italy and Gaul. At the time when the East under the Roman emperors grew wealthier again and overwhelmed decaying Italy, the architectural style was no more the leading fashion; both the third and the fourth Pompeian styles having developed directly from the second, probably in Italy, perhaps the third style in Alexandria also (see Ippel, *Der dritte pompeianische Styl*, Berlin, 1910) were decaying in the second century A.D. and did not suit the tastes of the new world of the East, closely connected as they were with the old traditions of the ancient Eastern monarchies. So the architectural style remained confined to Italy and to the western provinces of the Roman Empire. The

literary notions I alluded to are Plin. *N.H.* xxxv. 116, 117 and Vitruv. vii. 5. I have dealt with them from the point of view of the history of architectural landscape painting in my 'Die hellenistisch-römische Architekturlandschaft' (*Röm. Mith.* 1911, 139 foll.); compare G. Rodenwaldt, 'Megalographia,' *Röm. Mith.* 1914, 194 foll. I have nothing to change in my views, as the question of the origin of landscape and the question of the origin of the architectural style have to be treated separately and ought not to be mixed up.

The two new styles which came to supplant the structural style in the East and to fight the architectural style in the West—the *flower* and the *incrustation style*—are both of Oriental origin.

The naturalistic flower-style seems to have been born in Egypt. I cannot deal with the matter at length, but I must remind the reader of Egyptian monuments of the New Kingdom, like the painted tombs of Sheikh Abi-el-Gourna near Thebes, the tombs near Elephantine, and the discoveries made in the residence of Akhenaten both of mural decorations on stucco and of floor-decorations.

The flower-style has two sub-divisions—the carpet-style and the true flower-style. I have dealt at length with both in my above-mentioned article on the painted glass vessels from Olbia and Kerch.

The leading idea of the carpet-style is to reproduce on the wall or ceiling a rich woven carpet or stuff covered with flowers. A good idea of these stuffs and carpets can be derived from thousands of linen and woollen clothes found in the graves of Antinoë and other towns of Egypt. They are chiefly adorned with naturalistic and stylised flowers.

It is worthy of mention that examples of the carpet-style are not to be found in South Russia, but are numerous in countries closely connected with Egypt. The most of them come from Kyrene (see Pacho, *Voyage en Cyrénaïque*) and North Africa (chiefly mosaics). Both countries stood under the direct influence of Egypt. I note also that the carpet-style found its way to the West: we can see rich Alexandrian carpets painted on the newly discovered ceiling of the Palatine of the time of the second style, and in many houses of Pompeii of the time of the fourth style the walls are painted not in the architectural fourth style but in the new carpet-style: the painter dropped the columns and prospects and covered the walls from the dado to the cornice with a rich carpet of yellow or red colour. I could adduce about ten examples, all unpublished. For as it is the more interesting as our wall-decoration, consisting of coloured paper adorned with naturalistic or stylised flowers, derives directly from this Egyptian carpet-system. A careful examination of the remains of wall-painting in the western provinces shows that they were not inaccessible to the new fashion.

The naturalistic flower-style differs from the carpet-style in that naturalistic or stylised flowers are not disposed symmetrically on the surface, forming neatly geometrical ornaments characteristic of the textile technique, but are strewn in disorder on the surface, mixed up with plants, animals, birds, garlands, etc. This style is widely spread throughout the

whole ancient world, beginning with the first-second centuries A.D. It derives directly from the naturalistic tendencies in Hellenistic and Roman art: mosaics of Delos and Pergamon, silver vessels with engraved ornaments, reproducing a mosaic (see Mathies, *Alt. Myth.* 1914, 114 foll.), painted clay-vessels of different kinds of the Hellenistic period, etc., show the same system. There is no doubt that the fashion derived from a Ptolemaic revival of old Egyptian decorative art, and it is very likely that here, too, real architecture gave the first impulse (see Stadniczka, 'Das Symposium Ptolemaios II.', *Abh. der Sächsis. Ges. Phil.-hist. Kl.* xxx. No. 2; F. Caspari, 'Das Nilschiff Ptolemaios IV.', *Jahrb. d. d. arch. Inst.* 31 (1916), 1 foll.; A. Frickenhaus, 'Griechische Bankethäuser', *Jahrb. d. d. arch. Inst.* 32 (1917), 114 foll.). But the movement grew slowly and invaded the mural decoration not earlier than in the first century B.C. The growth of the fashion can be studied in the painted tombs of Kertch. The earliest example, the vault of Zaizova, belongs to the time of Augustus. In the second half of the first century A.D., and in the whole second century it is the dominating style. But Kertch is not alone. The same system dominates the textiles of Egypt (the earliest belong to the second century A.D.); examples of wall-paintings of this style are to be found as early as in Pompeii (decorations of some little house-shrines); many sepulchral vaults in Rome are painted with strewn flowers; we can follow the spreading of the fashion on floor-mosaics in Africa and on tombs from Leptis Magna and Palmyra, as well as on tombs of Phoenicia, Salomè in Dalmatia, Serbia, and Bulgaria. As we have seen, the fashion is not confined to tombs and the spreading of it cannot be explained by religious motives. Mosaics and textiles have nothing to do with tombs, and the house of Attalus in Pergamon, painted in Roman times, as well as many houses in Rome and many rooms in the catacombs, demonstrate that dwelling-houses as well were decorated in the same fashion.

The flower-style is combined in Kertch with the real *incrustation* style. This style, as already indicated in the text of my article, has nothing to do with the first Pompeian style. It is a kind of mosaic consisting of big slabs of coloured marble forming geometrical designs. The whole development is traced by Vitruvius and Pliny. The style originated in Asia Minor and was certainly imitated from Persian buildings: the house of Mausolus was the first example known to Pliny and Vitruvius; see Plin. *N.H.* 36, 47; Vitr. ii. 8, 10; the further evolution is depicted by Pliny, *N.H.* 35, 2; 36, 134 and 114. The innovation consisted in adorning the walls, ceilings and floors with different designs formed by coloured marbles, coloured glass, metals, etc. It has nothing to do with the much earlier mosaic (see R. Engelmann, *Berl. Phil. Week.* 1907, 1653, against R. Delbrück, *Hellenistische Bauten in Latium*, 50 foll.; Gauckler, who first expressed in Darmberg et Saglio, *Dict. ant. art. Muséum d'ap. la*, the wrong opinion, has since agreed with Engelmann), and was characterised by Pliny with the expression 'lapide pingere.' This heavy and pompous style is a right expression of the strong influence of the ancient Orient on the Roman Empire. We must

study it not from originals in the houses and palaces, but from copies in tombs and more modest houses, where these decorations were imitated in colours on stuccoed walls. Examples of this painted reproduction are to be found everywhere. The earliest are to be found in Pompeii: the latest decorations of the fourth style show constantly a base adorned with marble incrustation. Afterwards in the first and following centuries we have examples everywhere: in dwelling houses, catacombs and churches in Rome, also in tombs, in the above-mentioned tombs of Egypt, in Palmyra, etc., etc. In the West the new style had to struggle like the flower-style and in combination with it against the latest architectural style. We know that the vanquisher was not the architectural style, although it had a revival in the early Renaissance decoration of private houses in Italy and elsewhere. For the late Roman Empire and the Dark Ages the flower and incrustation decorative style was *the* style, a style which finally overpowered all its rivals and gave rise to many new and very important creations.

M. ROSTOVTZEFF.

CLEOSTRATUS.

I do not know of any book or published paper devoted to Cleostratus. In the indexes to most histories of astronomy you will seek his name in vain, and, where you do find it, you are referred to a few jejune paragraphs or more often to a single sentence. Boll in his *Sphaera* (1903) honours him with three pages (191-194), based on a passage in Pliny and a scholium on Euripides, but he misinterprets both passages and holds one of them to be based on a misunderstanding of some older writer. Nearly all the passages bearing on him are to be found with notes of varying value in Diels, *Fragmente der Vorsokratiker*², ii. (1912), pp. 197, 198, where they occupy rather more than a page. Some valuable comments and one reference which is not in Diels will be found in Breithaupt's treatise *De Parmenisco Grammatico* (1915). And yet, for all this neglect, there are attributed to Cleostratus two capital contributions to Greek astronomy, viz. the introduction of the signs of the zodiac and the authorship of the eight years' cycle of intercalations.

The following is, so far as I know, a complete list of passages bearing on Cleostratus.

(1) From a life of Aratus, excerpted in E. Maass's *Commentariolum in Aratum reliquiae* (1898), p. 324:—

Βόηθος δὲ ἡ Σιδώνιος ἐν τῷ α' περὶ αὐτοῦ [sc. Ἀράτου] φησιν οὐχ Ἡσιόδου ἀλλ' Ὅμηρου ζῆλιότην γεγενῆσθαι: τὸ γὰρ πλῆγμα τῆς ποιήσεως μείζον ἢ κατὰ Ἡσιόδον· πολλοὶ γὰρ καὶ ἄλλοι Φαινόμενα ἔγραψαν καὶ Κλεόστρατος καὶ Σμένθης καὶ Ἀλέξανδρος ὁ Αἰτωλὸς καὶ Ἀλέξανδρος ὁ Ἐφέσιος καὶ Ἀλέξανδρος ὁ Λυκατῆν καὶ Ἀνακρέων καὶ Ἀρτεμίδωρος καὶ Ἰππαρχος καὶ ἄλλοι πολλοί. ἀλλ' ὅμως πάντων λαμπρότερον ὁ Ἀράτος ἔγραψεν.

In this passage Κλεόστρατος is a correction made by Bergk and published by Meineke, *Zeitschrift für die Alterthumswissenschaft* (1843), p. 23, for the MS. reading Κλεοστῆρης.

The writer does not make it clear whether he gives this list on his own authority or cites it from Boethus, but the inclusion of Alexander of Ephesus shows that the list cannot have been compiled till after the time of Boethus.

(2) From a catalogue of writers on Aratus, edited by Maass in A. Kießling's *Philologische Untersuchungen*, xii. (1892), p. 121, reprinted by Breithaupt, *loc. cit.* pp. 49, 50:—

οὐ περὶ τοῦ ποιητοῦ συνταξάμενος.

Ἀτταλὸς Ῥόδιος. Ἀρίσταρχος Σάμιος. Ἀπολλώνιος γεωμέτρης. Ἀντίγονος γραμματικὸς. Ἀγησιάνης. Ἀρίστουλλοι δύο γεωμέτραι. Βόηθος. Γεμῖνος. Διόδοτος. Δίδυμος Κυδῖος. Ἐρατοσθένης. Ἐρμῖππος. Εὐαίμετος. Ζήνων. Ἡλιόδωρος στωικός. Θαλῆς. Ἰππάρχος Βιθυνός. Κράτης. Πύρρος Μάγνης. Παρμενίσκος γραμματικὸς. Σμίνθης. Τιμόθεος.

Εὐαίμετος ἕτερος. Ἐρμῖππος περιπατητικὸς. Καλλίμαχος Κυρηναῖος. Κλεόστρατος Τενέδιος. Νουμήμιος γραμματικὸς. Παρμενίδης.

Ἀπολλώνιος γραμματικὸς. Ἀρίστουλλος μέγας. Ἀρίστουλλος μικρὸς. Ἀρίσταρχος γραμματικὸς. Ἀριστοφάνης. Ἀλέξανδρος Λίτιος. Ἀλέξανδρος Ἐφέσιος. Δίδυμος ποιητής.

A similar but shorter list which does not include the name of Cleostratus is found at the close of a MS. of Clemenus's *Εἰσαγωγή εἰς τὰ Φαινόμενα*, printed with apparatus by Maass in *Hermes*, xvi (1881), p. 388. But in this case the word πόλου takes the place of ποιητοῦ in the title, and there can be no doubt that Von Wilamowitz-Möllendorff (A. Kiessling's *Philologische Untersuchungen*, iv, [1881], p. 330) is right in reading πόλου in the Kaiger list also. Maass has shown (A. Kiessling's *Philologische Untersuchungen*, xii, pp. 123-139) that in this instance πόλος is used in the sense of 'sky.' Here again Κλεόστρατος is the result of a correction. The MS. reading is Καλλίστρατος, corrected by Meineke, *Philol. exercit. in Athen.* i. (1843), p. 23, cited by Maass.

(3) Theophrastus, *περὶ σημείων*, i. 4, ed. Wimmer (Paris, 1866), p. 389, διὸ καὶ ἀγαθοὶ γεγένηνται κατὰ τὸναι τιτὰς ἀστρονόμοι ἔναι οἷον Ματρίκετας ἐν Μηθύμῃ ἀπὸ τοῦ Ασπετίμου, καὶ Κλεόστρατος ἐν Τενέδῳ ἀπὸ τῆς Ἰδης, καὶ Φαεινὸς Ἀθήνησιν ἀπὸ τοῦ Λυκαβηττοῦ τὰ περὶ τὰν τροπὰν συνείδε, παρ' οὗ Μέτων ἀκούσας τὸν τοῦ ἐνὸς δεόντα εἰκοσὶ ἐνιαυτὸν συντάξεν. ἦν δὲ ὁ μὲν Φαεινὸς μέτοικος Ἀθήνησιν ὁ δὲ Μέτων Ἀθηναῖος. καὶ ἄλλοι δὲ τῷ τρόπῳ τούτῳ ἡστρολόγησαν.

(4) Seylax 78, ed. Fabricius (1878), p. 27:—

Καὶ πῆσοι κατὰ ταῦτα κεῖται Τενέδος καὶ λιμὴν, ὅθεν Κλεόστρατος ὁ ἀστρολόγος ἔστι.

(5) Atheniensis, vii. 278 A (ed. Kaibel, ii. [1887], p. 115):—

ὁ δὲ ὀφθαλμὸς Ἀρχέστρατος ἐν τῇ Γαστρολογίᾳ, οὕτως γὰρ ἐπιγράφεται φησι Λυκάφρων ἐν τοῖς περὶ Κωμῳδίας, ὡς τὴν Κλεοστράτου τοῦ Τενεδίου Ἀστρολογίαν περὶ τῆς ἀμίας φησὶν ὁρῶν.

Here Ἀστρολογίην is a correction by Heringa for Γαστρολογίαν.

(6) *Opusc. misc.* ed. Dindorf in Migne's *Patrologia Graeca*, 92 (1865), col. 301:—

ταύτη τῇ ἔτει Θαλῆς ὁ Μιλήσιος φιλόσοφος ἐν Τενέδῳ ἀπέθανεν.

(7) 'Lex Grammaticalis,' ed. Bekker, *Corpus Scriptorum Hist. Byz.*, xxvi, (1842), p. 36—

κατὰ τούτους τοὺς χρόνους Θαλῆς Μιλήσιος ἐν Τενέδῳ ἀπέθανε καὶ Σίβυλλα Ἑρσθραία ἐγνωρίζετο.

(8) Pliny, *Nat. Hist.* ii. 8 (6), 30.

Circulorum quoque caeli ratio in terrae mentione aptius dicitur, quando ad eam tota pertinet, signiferi modo inuentoribus non dilatis. obliquitatem eius intellexisse, hoc est rerum fores aperuisse, Anaximander Milesios traditur primus Olympiadō quinquagesima octava, signa deinde in eo Cleostratus, et prima arietis ac sagittarii, sphaeram ipsam ante multo Atlas.

(9) Euripides, *Rhesus*, 527–537 (ed. Murray, 1909).

τίνας ἂ φυλακὰς τις ἀρείβει
τὰν ἐμῶν; πρῶτα
δύσται σημεῖα καὶ ἐπτάποροι
Πλειάδες αἰθέριαι· μέσα δ' αἰετὸς οὐρανοῦ ποτάται,
ἐγρεσθε, τί μέλλετε; κοῖτᾶν
ἐγρεσθε πρὸς φυλακῶν.
οὐ λεύσσετε μηνῶδος αἴγλαν;
ἀὼς δὴ πέλας, ἀὼς
γίγνεται, καὶ τις προδρόμων
ἡδὲ γ' ἐστὶν ἀστήρ.

Scholium (Schwartz, *Scholια ἐν Εὐριπίδῃ*, ii. [1891], p. 340) (I have for the most part rejected Schwartz's conjectural emendations.)

Κράτης ἀγορεύει φησὶ τὸν Εὐριπίδην τὴν περὶ τὰ μετέωρα θεωρίαν διὰ τὸ νέον εἶναι ὅτε τὸν Ῥῆσον ἐδίδασκε. μὴ γὰρ δύνασθαι Πλειάδων καταδυμένους <τοῖς>¹ τοῦ αἰετὸς μεσημεριεῖν. ὑπὸ γῆν γὰρ ἐστὶ τότε ὁ αἰγόκερως, ἐφ' οὗ ὁ αἰετὸς ἰδρύται, καὶ εἶ Πλειάδων δυομένων ὑπὲρ μὲν γῆς εἰς ζῳδία τάδε, ταῦτος δίδυμοι καρκίνοιο λέων παρθένοιο ζυγὸς· ὑπὸ γῆν δὲ τάδε, σκορπίος τοξότης αἰγόκερως ὕδροχόος ἰχθύς κριόν. καὶ ταῦτα μὲν ὁ Κράτης. ἔοικε δὲ ὑπὸ τῆς φράσεως ἀμφιβόλον <αὔσης> κεκρατῆσθαι. τὰ γὰρ πρῶτα σημεῖα καὶ τὰς Πλειάδας ὥσθι καταδυέσθαι λέγειν τὸν Εὐριπίδην. τὸ δὲ οὐχ οὕτως ἔχει, ἀλλὰ τὰ μὲν πρῶτα σημεῖα τῆς φυλακῆς φησὶ δύεσθαι, τὰς δὲ Πλειάδας ἀνατέλλειν. πῶς γὰρ ἐπὶ καταδυομένων εἶπεν αἰθερίαις αὐτάς; ὥστε τριχόθεν τὸν καιρὸν ὑπὸ <ταῷ> φυλάκων δηλοῦσθαι, ἀπὸ τῆς δύσεως, ἀνατολῆς καὶ μεσημεριήματος. ὁ μὲν οὖν Παρμενίδης πρῶτα σημεῖα φησὶ λέγεσθαι τὰς τοῦ σκορπίου πρώτας μοίρας διὰ τὸ ὑπὸ τῶν ἀρχαίων οὕτως αὐτάς λέγεσθαι, καὶ ὅτι ταύταις ὁ Βροῦτης ἅμα ἀρχεται καταδυέσθαι. Κλεόστρατος γαῖν τὸν Τενέδων ἀρχαίων οὕτως.

ἀλλ' ὅποταν τρίτος ἡμῶν ἐπ' ὀγδόκορτα μένῃσι,
σκορπίου εἰς ἅλα πίπτει ἅμ' ἧοι φαινομένησι . . .

¹ So Fotheringham, *op. cit.*, p. 31.

τοῦτο δὲ παραδείξας ὁ Παρμενίσκος ὅτι καταδέχεται τὰ πρῶτα σημεῖα τοῦ σκορπίου, καὶ τὰ περὶ τῆς Πλειάδος ἐπιτολῆς ἐπέξεισιν· 'ὅταν γάρ, φησὶν, Ἑρίπιδος λέγῃ καὶ ἐπτάποροι Πλειάδες αἰθέριαι, οὐ δύεσθαι τότε αὐτάς, ἀλλ' ἐμπαλιν ἀνατέλλειν ἐκ τοῦ ὑπὸ <γῆν> τμήματος εἰς τὸ ὑπὲρ <τόν> ὀρίζοντα ἀνιούσας· καὶ τοῦτο εἶναι τὸ καὶ ἐπτάποροι Πλειάδες, ὅταν εἰς τὴν ὡς πρὸς ἡμᾶς οὐρανὸν ἀφικνούμενοι. ταῦτα δὲ κασταστησόμενος, ὁμολογεῖ, φησὶ, τοῖς Ἑρίπιδος τὰ φαινόμενα. τὰ μὲν πρῶτα σημεῖα τῆς ὥρας εἰς δύοσιν κεχώρηκεν, ἡ δὲ Πλειὰς ἀνατέλλει, ὃ δὲ ἀετὸς πρὸς τὸ μέσον κεχώρηκε.'

Compare Theophrastus Alexandrinus on Aratus, *Phaenomena*, 719, in Maass, *Commentariorum in Aratum Reliquiae*, p. 470:—

'Ὅτε λοφισὴ τε καὶ οὐρή· καὶ καθ' ὃν καιρὸν συμβέβηκε τοῦ Κήτους τὴν τε λοφίαν καὶ τὴν οὐρὰν ἐκ τῶν νοτίων μερῶν ἀνατέλλειν, τότε δὴ καὶ ὁ Ἀρκτοφύλαξ ἄρχεται μετὰ τοῦ πρώτου ζωδίου, τουτέστι τοῦ Σκορπίου, δύνειν, ὃς ἐστὶ κατὰ διάμετρον τῷ Ταύρῳ.

(10) Hyginus, *Poeticon Astronomicum*, ii. 13, ed. Chatelain and Legendre, *Bibliothèque de l'École des hautes études*, 180 (1909), p. 27, fully cited by Breithaupt, *De Parmenisco Grammatico* (1915), p. 47:—

Hoc autem ludos Cleostratus Tenedius dicitur primus inter sidera ostendisse.

(11) Censorinus, *De die natali*, xviii. 4-6:—

Hoc quoque tempus [i.e. quadriennium], quod ad solis modo cursum nec ad lunae congruere uidebatur, duplicatum est et octaeteris facta, quae tunc enneasteris uocata, quia primus eius annus nono quoque anno redibat. hunc circuitum vere annum magnum esse pleraque Graecia existimauit, quod ex annis uertentibus solidis constaret, ut propriis in anno magno fieri par est, nam dies sunt solidi . . . uno minus centum, annique uertentes solidi octo. hanc octaeteridam uulgo creditam est ab Eudoxo Cnidio institutam, sed hanc (alii *Jahn*) Cleostratum Tenedium primum ferunt composuisse et postea alios aliter, qui mensibus uario intercalandis suas octaeteridas protulerunt, ut fecit Harpalus, Nauteles, Menestratus, item alii, in quibus Diositheus, cuius maxime octaeteris Eudoxi inscribitur. ob hoc in Graecia multae religiones hoc interuallo temporis summa caerimonia coluntur, Delphis quoque Iudi qui uocantur Pythia post annum octauum olim conficiebantur.

All that we know of Cleostratus is deduced from these eleven passages. The first seven need not detain us long. We learn from them that he belonged to Tenedos; and it will be observed that according to the Paschal Chronicle and Leo Grammaticus' Thales died at Tenedos, from which Von Wilamowitz-Möllendorf (cited by Dials, *Fragmente der V.* i. p. 8) has inferred with great probability that there was a school tradition which regarded Cleostratus as the successor of Thales. As the traditional date for the death of Thales is 545 B.C., this would place the floruit of Cleostratus in the latter half of the sixth century B.C. This conclusion is confirmed

by the passage cited from Pliny, which places Anaximander's discovery of the obliquity of the ecliptic in the 58th Olympiad, i.e. in 548-544 B.C., and Cleostratus's work on the signs of the zodiac at a later date, while further confirmation is obtained from the passage cited from Censorinus, according to which Cleostratus produced his octaeteris before Harpalus, who is described in the *Laterculi Alexandrini* (ed. Diels, *Abhandlungen der königlich preussischen Akademie der Wissenschaften* [1904], pp. 8, 9) as the engineer of Xerxes' bridge over the Hellespont (481-0 B.C.).²

We also learn that Cleostratus wrote a poem called *Ἀστρολογία*, from which the hexameter verses cited by Parmeniscus are presumably derived. We do not know whether he left any other writings. It would appear that this work dealt with *φαινόμενα*, that is, with the successive risings and settings of different stars and groups of stars. This part at least of the work may well have been based on his own observations, for observations made in a different latitude would not hold for Tenedos. Moreover, there would appear to have been little written in Greece on this subject before Cleostratus, and the passage from Theophrastus shows that Cleostratus left a reputation as an observer. Like Hesiod he doubtless introduced solstices, if not equinoxes, into his series of phenomena, and his method of observation is at least a sign of the care with which he attempted to obtain accurate results. The determination of the exact date of a solstice remained a difficulty throughout the whole course of ancient astronomy. Even Ptolemy deduced from his own observation a date 38 hours later than the true date for the summer solstice. What Theophrastus probably means is that Cleostratus watched morning by morning the exact spot on Mount Ida where the winter sun rose, and tried to determine on which day the sunrise point lay furthest west. The importance of the mountain would then lie in the fact that it gave a clearly defined and rapidly varying horizon, which made it easier to compare the sunrise point of one day with the sunrise point of the next. The day on which the sun rose furthest to the west would of course be the day of the winter solstice. But, since for some days on either side of the solstice there is very little variation in the sunrise point, it would be impossible to determine the solstice with complete accuracy by this method. I owe this explanation to Redlich, *Der Astronom Meton und sein Zyklus* (1854), p. 34, cited by Günzel, *Handbuch der mathematischen und technischen Chronologie*, ii. (1911), p. 375. It will be noted that all the observers named by Theophrastus

² Diels, *Fragments der Vorsokratiker*, II. 198, argues that several octaeterides must have passed before the necessary corrections could be discovered, and, therefore, proposes to place Cleostratus about 520 B.C. The date is reasonable enough, but the argument implies that Cleostratus's octaeteris was used in practice and Harpalus's corrections were based on experience. There is no ground for either assumption. As will be seen later,

the octaeteris remained an astronomical conceit, and there is every reason to believe that the succession of octaeterides and other cycles produced by the astronomers of the fifth century B.C. did not owe their origin to defects in earlier systems proved by experience, but were extensions in the art of combining days, months, and years, of which the relative mean durations had been learned from Babylon.

used mountains to the south-east or north-east available for the observation of sunrise at one or other solstice.

I come now to my eighth excerpt, the passage from Pliny, which has caused great trouble to the commentators. It will be observed that Pliny states that he will not postpone mention of the inventors or discoverers of the zodiac or 'signifer' though he will postpone the discussion of the circles of the stars. From this we may infer that Anaximander and Cleostratus mentioned in the next sentence are to be regarded as 'signiferi inventores'. The meaning of the next sentence down to 'quingagesima octava' is clear enough. 'Anaximander of Miletus is said to have first recognised the obliquity of the zodiac, that is to have opened the door of the subject, in the 58th Olympiad.' In the next clause with 'Cleostratus' as subject we have to supply the verb and also the noun qualified by 'prima'. If we treat the sentence from a purely grammatical point of view without regard to the sense, we should naturally supply 'intellexisse traditur' from the previous clause as the verb, while 'prima' should either qualify 'signa' supplied from the first half of the clause, or should mean first things or first points without a noun understood. This clause would then mean 'Afterwards Cleostratus is said to have recognised the signs in it, i.e. in the zodiac, and the first points or first signs of Aries and Sagittarius.' The fact that no commentator has yet taken the passage in this literal way is doubtless, due to their failure to find a sense for it. One translation that has found currency makes *signa* 'some of the signs' and then understands that Aries and Sagittarius were the first signs that Cleostratus introduced. Boll, *loc. cit.*, recognizes that the passage must mean that Cleostratus introduced all the signs, but fails to find a reasonable sense for the second half of the clause, and supposes that Pliny's authority had stated that Cleostratus had been the first to introduce Aries and Sagittarius into the zodiac. No commentator has grasped that 'prima signa' was a technical term, being the Latin translation of *πρῶτα σημεῖα*, which occurs in the passage from the *Rhesus* of Euripides and the scholium upon it, which make up my ninth excerpt. I take it then that what Pliny asserts is that Cleostratus is said to have recognised the signs in the zodiac and the *πρῶτα σημεῖα* of Aries and Sagittarius.

What, then, is the meaning of *πρῶτα σημεῖα*?

An answer is supplied in the ninth excerpt by Parmeniscus. He says that Euripides gives this name to the first degrees of Scorpio because they are so named by the *ἄρχαϊοι*, and adds that Bootes sets simultaneously with these. He then proceeds to cite Cleostratus of Tenedos *ἄρχαϊος*, 'But when the third day beyond eighty remains,' or 'But when it or he remains the third day beyond eighty, something of Scorpio falls into the brine at the time of the appearing of dawn.' Doubtless the missing phrase on which the genitive *Σκορπίου* depends is *πρῶτα σημεῖα* or *σημεῖα πρῶτα* or words to that effect; otherwise there is no point in Parmeniscus's citation of these lines as illustrative of the meaning of *πρῶτα σημεῖα*. It would follow then that the phrase *πρῶτα σημεῖα* was used by Cleostratus with the genitive of

the name of the sign, just as 'prima [signa]' is by Pliny and as *πρῶτα σημεῖα* is again by the scholiast in the sentence immediately following. It may be observed that the scholiast also uses the phrase *πρῶτα σημεῖα τῆς φυλακῆς* and seems to cite from Parmeniscus the phrase *πρῶτα σημεῖα τῆς ὥρας*. It is true that in both these instances critics have bracketed the mysterious genitives, but that hardly seems a fair way of getting rid of them. If there were other *πρῶτα σημεῖα* beside those of Scorpio the meaning would be clearer. The *πρῶτα σημεῖα* of Scorpio are the *πρῶτα σημεῖα* of this particular watch (*φυλακή*) or season of the year or night (*ὥρα*). And we see that Pliny knows *πρῶτα σημεῖα* of two different signs.

It is sad to see what terrible havoc has been made of this passage by the innocent little phrase *καὶ ὅτι ταῖταις ὁ Βούτης ἄμα ἀρχεται καταδύεσθαι*. Grammar and trigonometry conspire to render impossible that these words can represent any statement by Cleostratus. But Schwartz and Boll, Diels and Von Wilamowitz-Möllendorf, have decreed that they do. Ignoring trigonometry and having in textual emendation a sovereign spell before which all grammatical difficulties vanish, they have dragged this phrase or words to like effect either into the text or into the exposition of the lines from Cleostratus. Poor Cleostratus! we have only two lines from him. Could not the editors have let them alone?

Let us attend for a moment to the construction. Down to the second *λέγεσθαι* the sentence is clear enough. 'Parmeniscus says that the first degrees of Scorpio are called *πρῶτα σημεῖα* because they are so called by the *ἀρχαῖοι*, and that,' etc. Surely the phrase introduced by 'and that' (*καὶ ὅτι*) can depend on *φησι* and *φησι* only. 'Parmeniscus says . . .'. So the statement about Bootes is made by Parmeniscus on his own authority. It could not have been made by Cleostratus, for at Tenedos in the time of Cleostratus Bootes did not begin to set with the first degrees of Scorpio; on the contrary it did not begin to set till Scorpio had wholly sunk below the horizon.

Why then did Parmeniscus drag in this otiose comment? It must be remembered that Parmeniscus was not merely a commentator on Euripides. He was also the author of a work on the sky, three fragments of which are preserved to us. (Numbers 18, 19, 20 in Breithaupt, *op. cit.*) He doubtless knew his Aratus and the controversies that raged round him. The author of a polemic against Crates was not likely to miss an opportunity of expressing his opinion on a debated question of astronomy. Hipparchus (ii. 2, ed. Manitius [1894], pp. 140-150) discusses at great length with what sign Bootes begins to set and in opposition to Aratus, Eudoxus, and Attalus holds that Scorpio is the sign in question. It is clear from the passage which he cites from Attalus that he was not the first to hold this opinion, and it is interesting to find his view endorsed by Parmeniscus.

When Parmeniscus explains that *πρῶτα σημεῖα* means the 'first degrees' of Scorpio, we must not take him too literally. Parmeniscus and his contemporaries were doubtless in the habit of specifying the degrees of

the invisible ecliptic that rose and set with different stars. Hipparchus notices such degrees for every constellation and possessed instruments for observing them. But we may rest assured that Cleostratus did nothing of the kind, much less did Euripides or whoever wrote the *Rhesus* imagine that a Trojan guard measured the movements of the invisible ecliptic. The *πρῶτα σημεῖα* are, doubtless, not the first degrees of the sign of Scorpio on the ecliptic, but the first stars of Scorpio to set. The Greek *σημείον*, unlike the Latin 'signum,' is never a zodiacal or other constellation, but either a mathematical 'point,' such as the first degree of Scorpio and the solstitial and equinoctial points on the ecliptic, or else an 'indication,' such as the rising or setting of a star or group of stars which might indicate the time of year or the time of night. It is clear that the word is here used in the latter sense, except that it is not the abstract setting of the star but the concrete star setting that is called *σημείον*. And, thus interpreted, the setting of the *πρῶτα σημεῖα* tallies exactly with the meridian passage of Altair, the central and brightest star of Aquila, if we make the computation either for Athens or for Troy, and for the middle of the fifth century B.C.

I wish we could as easily save our author's credit in the matter of the Pleiades. I cannot with Crates believe him to have been so ignorant of astronomy as to have referred to the setting of the Pleiades. The Pleiades that are *αἰθέριαι* are the Pleiades that have risen from the stream of ocean and reached the upper air. But no Pleiades should have been in the sky when the Eagle was in midheaven. They should have been about 10° below the horizon at that time. Assuming that they could be seen when their central and brightest star Alcyone was at a true altitude of 2°, I find that Altair would have passed the meridian by an hour and three minutes if we compute for Troy, by an hour and six minutes if we compute for Athens. So far from being on the meridian, it would be in azimuth 27° or roughly south-south-west at Troy, or in azimuth 29°, roughly south-west by south, at Athens. The *πρῶτα σημεῖα* would have set long ago, but other stars in Scorpio would still be visible, for Scorpio should have taken an hour and twenty-six minutes to set at Troy, an hour and seventeen minutes at Athens. It is obvious that if the meridian and setting stars could not be defined more exactly than this, they would be of no use for timing the watch. So there was something in Crates' objection after all. The author of the *Rhesus* does show an imperfect acquaintance with astronomy. It is true that the Pleiades would disappear rather more than half an hour before Scorpio began to appear on the eastern horizon; and our author might infer that the Pleiades would rise an equal interval before Scorpio began to disappear in the west and thus be *αἰθέριαι* or up in heaven when that phenomenon occurred. But the problem is not so simple.

Breithaupt has expressed the opinion that *πρῶτα σημεῖα* means the first of the two signs of Scorpio, the first sign being what we call Libra, but what many of the Greeks regarded as the Scorpion's claws and named *χηλαί*. It is certain, however, that this is not what Parmeniscus understood by the first degrees of Scorpio, and, as we have seen, the signs of the zodiac are

never called *σημεία*. Moreover Scorpio at Tenedos in the time of Cleostratus would begin to set before Libra.

The reference to the *ἀρχαῖοι* is interesting. Of course an emendator—on this occasion Dindorf—has proposed to make Cleostratus *ἀστρολόγος* instead of *ἀρχαῖος*. I do not think it has ever been noticed that *οἱ ἀρχαῖοι* in Hipparchus and Geminus when not qualifying a noun regularly means the early astronomers, beginning with Thales and descending as far as the third century B.C.³ Had this fact been realised, chronologists would not with one consent have mistaken the astronomical calendars described in the eighth chapter of Geminus for successive official calendars of Athens. The use of the same term by Parmeniscus suggests that it had acquired something of a technical meaning.

I confess that I am unable to identify either the phenomenon from which Cleostratus reckoned his 83 days or the *προδρόμων ἀστήρ* of the *Rhesus*.

We may now sum up the references to *πρῶτα σημεία* and see what they have in common. We have seen that both in the passage cited from Cleostratus and in the *Rhesus* the reference is to certain stars in Scorpio, presumably the first to set, and we may further notice that in both passages the setting is either at the appearance of dawn or when dawn is at hand. In other words the reference is to a morning setting, or to give it its technical name, a cosmical setting, and this raises the question whether the name *πρῶτα σημεία* was applied to these stars in relation to their cosmical setting only. I have no doubt that it was so. If we turn to Geminus's Calendar, we shall find Euctemon cited (Geminus, ed Manitius 1898, p. 228) for τὰ Σκορπίου οἱ πρῶτοι ἀστέρες δύνουσι, where the reference is to the cosmical setting of the first stars in Scorpio. Euctemon we know was an *ἀρχαῖος* and a contemporary of Euripides. The adjective *πρῶτος* applied as here to particular stars is, so far as I know, unique in the Greek calendars. It is certainly unique in the calendars cited by Geminus. I take it then that Euctemon's setting of the *πρῶτοι ἀστέρες* of Scorpio is the same as the setting of the *πρῶτα σημεία*. With this we may compare further the passage that I have excerpted from Theon. Here the setting Scorpio is described as τὸ πρῶτον ζῳδιακόν, though in this case there is nothing to differentiate the cosmical setting from any other setting.

That the phrase *πρῶτα σημεία* could not be used of the first stars of any and every constellation is proved not only by the absence of evidence for its use in respect of the constellations generally, but also by the use of the phrase in the *Rhesus*, where no constellation is named but Scorpio is clearly intended; from which it may be inferred that Scorpio was either the only constellation of which it could ever be said *πρῶτα δύεται σημεία* or else the only constellation to which the phrase would apply near the particular time of the night.

³ Cleanthes is included among the *ἀρχαῖοι* in Geminus, xvi, 2. From the way in which the *ἀρχαῖοι* are habitually criticised by Hipparchus,

it would appear that they were differentiated from the more modern astronomers by the inferiority of their mathematical methods.

Now in what sense are the first stars of Scorpio to set cosmically entitled to be called *πρῶτα* as distinct from other stars? To this there is a simple answer. If we arrange the different zodiacal constellations in the order in which they began their cosmical settings at Tenedos about 520 B.C. we shall find that Scorpio comes first after the vernal equinox. The vernal equinox was the starting-point of the Babylonian year and of the Babylonian zodiac. Cleostratus, as we shall see, derived his zodiac from Babylon, and therefore Scorpio took the first place among the cosmical settings.

If then we have *πρῶτα σημεῖα* of Scorpio in respect of cosmical settings, is there any other series that we might expect? The morning setting would naturally be matched by the morning rising, and the zodiacal constellation which first began to rise heliacally after the vernal equinox was Aries. And, sure enough, Aries is one of the constellations of which Pliny tells us that Cleostratus recognised the 'prima signa.' But I have sought in vain for any similar explanation of the 'prima signa' of Sagittarius. The presence of Sagittarius and the absence of Scorpio are equally striking in the Pliny passage. If Brethaupt is right in supposing (*op. cit.* p. 23) that Pliny drew his information from Varro, and Varro his from Parmeniscus, there is no room for the theory of a rival tradition here. The *πρῶτα σημεῖα* of Scorpio are abundantly attested, and not least by Parmeniscus's evidence; and I incline to the opinion that either Varro or Pliny has erroneously substituted Sagittarius for Scorpio. This seems easier than to suppose that Scorpio has been erroneously omitted and that Sagittarius was inserted for some valid reason which has hitherto escaped detection.

If Parmeniscus, as would appear, took the *πρῶτα σημεῖα* to mean the first degrees of the sign measured on the invisible ecliptic, if, like Hipparchus, he began his series of signs with the actual spring equinox, and if he observed at Alexandria, he would find that the setting of the *πρῶτα σημεῖα* of Scorpio followed the rising of the *πρῶτα σημεῖα* of Aries by an hour and thirty-one minutes. On the same assumption there might be about a month between the heliacal rising of the one and the cosmical setting of the other. If these assumptions are not all correct, we must amend these figures, but there can be little doubt that to him there was a perceptible interval between the two phenomena, which would account for the phrases *τὰ πρῶτα σημεῖα τῆς φολασῆς* and *τὰ πρῶτα σημεῖα τῆς ὥρας*.

Pliny's statement, then, as interpreted and corrected in the light of the passages cited, means that Cleostratus introduced the signs of the zodiac and the *πρῶτα σημεῖα* of Aries and Scorpio. The statement about the signs of the zodiac is perfectly consistent with what we know from other sources. Homer and Hesiod give us no zodiacal stars except the Hyades and Pleiades and give us no zodiacal constellation at all. The same applies to the fragments of Musaeus, Thales, Phocylus, and Anaximander, and with one possible exception to the fragments of the *Ἀστρονομία* which passed under the name of Hesiod. The one exception is the reference to the Scorpion in fragment 182 (ed. Rzsch, [1913], p. 202). It is true that Frank, *Leipzig*

Studien zur classischen Philologie, xii. (1890), p. 357, followed by Von Wilamowitz-Möllendorff, *Nachrichten von der königl. Gesellschaft der Wissenschaften zu Göttingen, Hist. phil. Klasse* (1895), p. 232, has held that this fragment may come from some other part of Hesiodic literature, while Rehm (*Mythographische Untersuchungen über griechische Sternsagen* [1896], p. 47) has on this ground alone placed the *ἄστρονομία* later than Cleostratus. There is also a school, represented powerfully by Maass (Kießling's *Philologische Untersuchungen*, xii. pp. 268–272), who place the poem later than Aratus. But it must be confessed that the view that at present holds the field is that the fragment in question belongs to the *ἄστρονομία* and that the *ἄστρονομία* is older than Cleostratus. The writer who has done most to establish the early date for the Hesiodic *ἄστρονομία* is Nilsson in *Rheinisches Museum*, lx. (1905), p. 180 ff. After citing two passages (Hesiod, fragments 263 and 38), where Aratus may conceivably be held to be imitating Hesiod, though there is nothing to show that the fragments of Hesiod come from the *ἄστρονομία*, he applies an argument which has carried weight with Diels (*Fragmente der Vorsokratiker*, ii. p. 195) and Rzach (article 'Hesiodos' in *Pauly-Wissowa*, viii. [1913], 1223), based on Pliny, *N.H.* xviii. 25 (57), 213. Pliny there cites as an example of the discrepancies of different writers on the dates of annual astronomical phenomena: 'occasum matutinum uergiliarum Hesiodus—nam huius quoque nomine exstat astrologia—tradidit fieri, cum aequinoctium autumni conficeretur, Thales XXV. die ab aequinoctio, Anaximander XXXI. (?), Euctemon XLVIII.' I may here put in a word of caution. It is improbable that all our authorities stated the actual interval between the equinox and the cosinical setting of the Pleiades. It is more likely that a compiler has in some cases calculated the interval from other correlations which his authority had asserted of one or both phenomena. Anyhow, Nilsson argues that of these discrepant statements that attributed to Hesiod is the most erroneous, from which he infers that it is the most ancient, holding that it is inconceivable that a late writer with trustworthy books before him would deliberately insert an erroneous astronomical statement in order to give his book an air of antiquity. Exactly the same argument had been used by Franz, *op. cit.* p. 356, and I do not know why Nilsson should get special credit for it. It is to be feared, however, that if astronomical errors are to be made a criterion of antiquity, much literature that passes as modern will have to be relegated to a remote age; and anyone who cares to check the dates of celestial phenomena given in the calendars collected in Wachsmuth's edition of Lydus, *De Ostentis*, will find numerous instances of errors as great as that attributed to Hesiod. On the whole I consider that the antiquity of the Hesiodic *ἄστρονομία* is not proved. If a work dealing with the legends of the constellations belonged to the sixth century B.C., it neither set nor followed a fashion, whereas, if it belonged to the Alexandrine age it was well in the fashion. But, when we find Franz doubting whether the work did deal with the legends of the constellations, we can only reply that if his view is right we have practically no evidence left by which to date the book, nor does the

date matter to us, for it is only in a legend of the constellations that Scorpio is named.

If, however, the mention of Scorpio is not older than Cleostratus, a mention of Capricorn follows close on his heels. See Epimenides, fragment 24 in Diels, *Fragmente der Vorsokratiker*, ii, 193.

It would appear then that with the doubtful, to my mind very doubtful, exception of Scorpio, there is no trace of the mention of a zodiacal constellation in Greek literature before Cleostratus, though a knowledge of the zodiac spread rapidly after his time. The next question is whence he derived his knowledge of the zodiac, and the answer lies ready to hand—from Babylon. An excellent account of the Babylonian zodiac by Jeremias is to be found in the article 'Stern' in Roscher, 68 Lieferung (1914), 1446-1470. From this it is clear that the twelve signs of the zodiac were already planned out and in common use long before the time of Cleostratus.* We are now learning that the Ionian school of philosophy did not consist of pioneers of original investigation or speculation. On the contrary they in large measure assimilated the products of Babylonian science. Dr. Langdon in his paper, 'The Babylonian Conception of the Logos,' *Journal of the Royal Asiatic Society* (1918), pp. 433-449, has shown very conclusively that the natural philosophy of Thales was of Babylonian origin and has given reasons, on which I do not venture to offer an opinion, for thinking that Babylonian influences were at work on Heraclitus. It has long been recognized that Thales could have learned the art of predicting eclipses from none but Babylonian sources, and there can be no reasonable doubt that all through the sixth century B.C. the thought of Babylonia along with its material civilization was streaming into Greece through Ionia. I do not know of any Babylonian influence on Greek thought before the reign of Nebuchadrezzar, and the influence would appear to have been seriously impaired by the outbreak of the Persian war, after which Greece, and more particularly European Greece, entered on the most original and most brilliant period of its history. The conquests of Alexander reopened the way to Babylonian influences, but the Greece that received them was far superior to Babylon in its philosophic and mathematical conceptions. It could still learn scientific facts, or astrological fancies from Babylon; it had nothing to learn in the way of abstract conceptions. Of sixth century Greece with its mind open to the barbarian later Greece was ashamed. Barely an admission is to be found in Greek sources of anything in science or philosophy learned from the Chaldeans,[†] the enemies in the golden age. What Thales learned abroad he was said to have learned from the Egyptians. Even Herodotus, who, as became an Asiatic Greek, still cherished in the fifth century B.C. an admiration for the civilization of the East, is accused by Plutarch of being φιλοβαβυλωνος (*De Herodoti Malignitate*, 857 A, ed. Bernardakis, v.

* I am assured by Dr. Langdon that the evidence in the case of Cancer is most satisfactory.

† Herodotus acknowledges the sun-dial, the gnomon, and the twelve hours of the day.

[1893], p. 214). And even to-day the history of the Ionian school is worked up for us by some of our leading scholars, with barely a hint that either its philosophy or its astronomy was of eastern origin. Democritus is an exception. It was admitted that he travelled in Babylon and other eastern countries and learned much of Babylonian lore. I shall have more to say of this Babylonian influence when I come to deal with the lunar-cycle.

I need hardly mention that the statement that Cleostratus was the first to name the Kios is consistent with the absence of their name from earlier writers. If he was the first to write a systematic poem on the constellations, there must have been many names which the later Greeks found in him and in no earlier writer.

I take it then that Cleostratus imported the signs of the zodiac and perhaps some other constellations from Babylon. He probably combined these with names of stars and groups of stars already used in Greece, and found from his own observations the order of their risings and settings and how these stood in relation to the solstices—no small work if it had stood alone.

But there is also attributed to him the invention of the octaeteris, or the eight years' cycle of intercalations, at least Censorinus gives it as one of two accounts. The alternative view that regarded Eudoxus as the author of the first octaeteris is manifestly mistaken, and Censorinus was clearly right in preferring the view that he merely produced or obtained the credit for a perfected octaeteris.

The view that Cleostratus was the author of the first octaeteris is nowhere challenged in antiquity, but it is almost universally rejected by modern scholars. In some measure Censorinus is responsible for this result, for he holds that many eight-yearly religious rites in Greece, and notably the Pythian games owe their period to the octaeteris. Now, of course, these eight-yearly festivals go back beyond Cleostratus. If therefore, Censorinus was right in explaining the eight-yearly festivals by the octaeteris, he was wrong in attributing the first octaeteris to Cleostratus. But Censorinus's explanation of the eight-yearly festivals is seriously compromised by his explanation of the four-yearly festivals. These he regards as older than the eight-yearly, and he explains them by the four years' cycle, which equates an exact number of solar years with an exact number of days, our own leap-year period in fact. Now, it is impossible to believe that such a cycle was known or could have had any calendarial significance if it had been known in early Greece. We are driven, therefore, to the conclusion that Censorinus's connexion of the festival periods with periods of intercalation is not a valid historical tradition but the fancy of a later age. And in fact it is easier to explain the festival periods as mere powers of two. We have two-year festivals, and four-year festivals, and eight-year festivals.

But our scholars will not have it so. Greek legends have been ransacked for intervals of eight years or nine—for, of course, nine may mean eight reckoned inclusively, though in some passages cited it clearly means nothing of the sort. I shall not deal with these here. Those who care for such

things will find them in plenty in the works of Otfried Müller, of Böckh, Sir James Frazer, and Mr. Cornford. Some discussion of them will be found in a posthumous work of the late Mr. W. H. Forbes on the Attic calendar and chronology of Thucydides, in which I was privileged to give him a little assistance, and which I am now editing. But I may venture on a reference to W. H. Roscher's two papers, 'Die Ennead. und Hebdömad. Fristen und Wochen,' *Abhandlungen der kön. sächs. Gesellschaft der Wissenschaften*, Band 48, *Philolog. Hist. Classe*, xxi, (1903), and 'Sieben- u. Neunzahl im Kultus u. Mythos d. Griechen,' *ibid.* Band 53, *Philolog. Hist. Classe*, xxiv, (1904), where it is shown what an important part all the early odd numbers 3, 5, 7, and 9 play in Greek legend and religion.

The attempt to find an octaeteris in the Olympic festival might seem more plausible to the unwary. We have a statement in Porphyry on *Iliad*, x. 252, ed. Schrader, p. 148, that the Olympic games were celebrated at intervals of 50 and 49 years *εναλλάξ*. These alternate periods are supposed by the moderns to make up the 99 months of the octaeteris. Now Porphyry's object is not to explain nicely the rules for fixing the time of the Olympic games but to illustrate the use of round numbers by the poets—in this case 50, while the unpoetic numeral 49 is ignored. It would be sufficient for his purpose if these two intervals normally alternated, as in fact they would in any well-regulated luni-solar calendar. I have thought it worth while to examine the Olympic years of the nineteenth century. Assuming that in modern, as in ancient, times the Olympic year is that following the Julian leap-year, and examining the date of Easter full moon in Olympic years, I find that from 1833 to 1909, the Easters of Olympic years fell alternately at intervals of 49 and 50 lunar months, yet it is known to everybody that our Easter full moons are regulated not by an 8 years' cycle, but by one of 19 years.

A scholiast on Pindar, *Ol.* iii. 35, says that the race was held sometimes after an interval of forty-nine months, sometimes after one of fifty, *ᾧθεν καὶ ποτὲ μὲν τῷ Ἀπολλωνίῳ μηνί, ποτὲ δὲ τῷ Παρθενίῳ ἐπιτελεῖται*. Now *ᾧθεν* is of course absurd. Even if the games had been always in the same calendar month, we should have expected this variation between forty-nine and fifty month periods, but the statement that the games were sometimes in Apollonius, sometimes in Parthenius, has been supposed to lend colour to the theory that they were governed by an octaeteris.

Another scholiast in two very corrupt scholia gives us the clue to this variation of calendar date, though I do not find that the explanation has ever been grasped. The passages are best studied in Drachmann's edition of the Pindar scholia, i. (1903), p. 114, and in Wöniger's article in *Klio*, v. (1905), pp. 1 ff. I reproduce the passages, but do not vouch for the text:—

ἡ δὲ γὰρ αὐτῶν· περὶ τοῦ χρόνου καθ' ὃν ἄγεται τὰ Ὀλύμπια καθ' ἐκάστην Ὀλυμπιάδα, καὶ Κώ<μαρχος> ὁ τὰ περὶ κλείων [ῥοτίνος Ἡλείων] συγκατάξας φησὶν οὕτως· πρῶτον μὲν οὖν παντὸς περιόδου συνέθηκεν ἐν τῇ ἡμέρᾳ ἄρχει νοσημῆαν μηνὸς δε θεοσυσθίας ἐν Ἡλίδι ὀνομάζεται, περὶ ὃν τροπαὶ ἡλίου γίνονται χειμεριναί. καὶ τὰ Ὀλύμπια ἄγεται ἡ μὲν ἐνὸς δὲ

ὅτος διαφέροντων τῇ ὥρᾳ, τὰ μὲν ἀρχομέν² τῇ ὁπώρας, τὰ δὲ ἐπ' αὐτῶν τῶν Ἀρκτοῦρον. ὅτι δὲ καὶ ἄγεται ὁ ἀγών, καὶ αὐτὸς ὁ Πίνδαρος μαρτυρεῖ.

διχόμεναι· διχόμεναι περὶ τὴν 18^η πανσέλητον οὕτως ἄγεται τὰ Ὀλύμπια, τουτέστι οὐμηνία [διχαμηνία?] Παρθενίου ἢ Ἀπολλωνίου μηνός, παρ' Αἰγυπτίους Θῶδ' ἢ Μεσσηρίων.

From the earlier of these passages I infer that the Eleian month Thosythias fell about the time of the winter solstice, and that the Olympic festival was celebrated in the eighth month after Thosythias. Which month this would be would depend on whether an intercalary month had been inserted since Thosythias. This explanation assumes that the proper place for an Eleian intercalary month was somewhere in the seven months following Thosythias, and it suggests that a vague coincidence of Thosythias with the winter solstice may have played the same part in the popular conception of the Eleian calendar that the vague coincidence of Hecatombaeion with the summer solstice did in the popular conception of the Attic calendar. The reason for keeping the Olympic festival at a fixed interval from Thosythias irrespective of intercalations was, very possibly, that some of the feasts falling before the intercalation were of the nature of a preparation for the great festival, which had to follow them at a fixed interval. Moreover, if the Eleians intercalated at short notice, they may have thought it undesirable that the intercalation should affect the date of a pan-Hellenic festival like the Olympic games. It would appear then that the fact that the games were sometimes in Apollonius, sometimes in Parthenius, had nothing to do with the octaeteris. It merely meant that there was sometimes an intercalation between Thosythias and the games and sometimes not. And of course there is nothing to prove that the rule given by the scholiast is ancient. Comarchus, if it is Comarchus, may have lived in the fifth, fourth, or third century B.C. We can only date him from the fact that a scholium on Plato, *Phaedo* 80, names him along with Pherecydes of the fifth century and Istrus of the fourth century, B.C.

I have already alluded to the eighth chapter of Geminus which describes the gradual growth and increasing perfection of lunar cycles, aiming at comprising an exact number of natural days, months, and years. I am convinced that this chapter has nothing to do with the calendars actually used in Greek cities, but only with the cycles propounded by astronomers, which may have influenced the cities, but would appear never to have been adopted by them. The early cycles are the work of οἱ ἀρχαῖοι, which, according to Geminus's usage, should mean the early astronomers. If anyone doubts, let him look at the attempts made to explain the Attic intercalations of the fifth and fourth centuries B.C. by either the eight years or the nineteen years cycle.³ Every investigator has to find reasons why his scheme of intercala-

² According to Drachmann this is the MS. reading, which he takes to represent ἀρχομένη. Weiger on the authority of Tycho Mommsen gives ἀρχομένη.

³ This subject will be more fully treated in Mr. Fotheringham's book on the Attic Calendar and Chronology of Thucydides.

tion does not fit the hard facts of the historical evidence. The simplest explanation is that the Athenians recognised no law of intercalation. The practical man treated the man of science with a contempt only one degree less profound than the contempt with which the man of science treated the rest of mankind.

What writers on the Greek calendar have never grasped is that in the ancient world cycles of intercalation were all but unknown to civil calendars whether Greek or barbarian. Wherever we have evidence, it would appear that the number of months in the year was determined annually not by rule of thumb, but by some living authority, just as the number of weeks in each vacation is determined annually in the University of Oxford by Hebdomadal Council.

If the Greek cities had desired, like modern Christians or modern Jews, to maintain a common calendar, they would doubtless have found it most convenient to regulate their intercalation by calendar rule, but, while each city regulated its own calendar, it was found most convenient to determine the question of intercalation year by year, just as Hebdomadal Council annually arranges the academic year.

Let him who has further doubts on this subject turn to Father Kugler's *Steinkunde und Sternkunde in Babel*, *Ergänzungen zum ersten und zweiten Buch* (1913), p. 131, where the author shows that down to the year 528 B.C. intercalation at Babylon was irregular. The figure 328 appears to require revision, for the list of Babylonian intercalary years given in Ginzler, *Handbuch der mathematischen und technischen Chronologie*, i. (1906), p. 133, supplemented by ii. (1911), p. 499, is consistent with the use of an octaeteris from 533 to 503 B.C. For the earlier part of the sixth century B.C. we can by means of numerous contract-tablets identify most of the intercalary years, and there can be no doubt that the intercalation was irregular. On the slowness with which cycles of intercalation came into use in antiquity, see Ginzler, *op. cit.* iii. (1914), pp. 360, 367. Intercalations were then unsystematic in Athens of the fifth and fourth centuries B.C. and in Babylon before 533 and after 503 B.C. The Jewish intercalation was still irregular, and was determined annually at the time represented by the Talmud. According to that work, regard might be had to the state of the roads, the bridges, and the passover-ovens, to the possibilities of pilgrims who had already started arriving in time for the passover, to the growth of the goats, lambs, and pigeons, of the corn and of the fruit, and to the number of days that had to elapse before the equinox. Intercalation according to some rabbis was to be avoided in a year of famine and in a sabbatical year, and a court might be influenced by the fact that the next year would be or the last had been a sabbatical year. In fact, almost anything might affect the decision except the place of the year in a cycle. (*Bab. Talmud, Synhedrin*, 10^b-13^b, ed. Lazarus Goldschmidt, vii. [1902] pp. 32-43.)

One may go further and say that from any cycle of intercalations it is possible to deduce mean lengths of the calendar month and calendar year, which in any calendar are intended to agree with the mean lengths of the

true month and year. Whenever, therefore, a cycle of intercalations existed, there should be some exact value assigned to these periods. Hesiod, of course, suggests no such knowledge. He gives a few intervals between annual astronomical phenomena, so that you may know how the year is progressing, but he expects his husbandman to know the seasons, not by numbering the days, but by observing the sky. The Greek doxographers know of no astronomer before Thales. We have preserved to us the names of many literary men of older date, but of no astronomer, and the inference is that Greece had no astronomer before Thales, and no exact knowledge of the lengths of months and years.

This is important, because all our evidence goes to show that the very idea of a cycle is a product of exact astronomy, and we have no knowledge of the use of a lunar cycle anywhere in the world before the time of Thales. Probably the oldest lunar cycle is that of 223 lunar months or 6,585½ days, about 18 years and 11 days, which Sundas calls the *σάρος*, and Ptolemy (iv. 2, ed. Heiberg I. [1898], p. 270) the *περιοδικὸς χρόνος*, or the same period multiplied by 3, i.e. 669 lunar months or 19,756 days, about 54 years and 33 days, which Geminus (chapter xviii.) and Ptolemy call the *ἑξαετηρίς*. Ptolemy regards these as the discovery of *οἱ ἔτι παλαιότεροι* as distinguished from *οἱ παλαιοὶ μαθηματικοί*. He describes Hipparchus as having detected a small error in these periods, but does not suggest how far beyond the time of Hipparchus the knowledge of them went. These cycles were not used for intercalation, though it would appear from one Babylonian tablet of perhaps the fifth century B.C. that it was known at that time that the sun, moon, and fixed stars returned approximately to the same relative positions in 27 years. See Kugler, *ubi supra*. The cycles of 18 and 54 years were cycles of eclipses. Now, while no exact knowledge of astronomy and therefore no astronomical cycle was needed to determine when an intercalation was due, nobody could predict an eclipse without some exact astronomical science. In *Sternkunde und Sterndienst in Babel*, ii. (1909), pp. 58-77, Kugler argues forcibly that the Assyrian predictions of eclipses in the seventh century B.C. were not made by cycle, but were anticipations deduced from observations made a few days before the expected time of conjunction or opposition. But a prediction at a longer interval involves the use of a cycle, and, as Herodotus (i. 74) informs us that Thales predicted a change of day into night (i.e. a total eclipse of the sun) for a particular *ἐνιαυτός*, which I suppose means 'year,' he must have used a cycle. He doubtless learned the cycle from the Babylonians—though, as it happens, we have not yet run across an example of its use in Babylon before his time.

The first requisite for an exact determination of an astronomical period is a continuous measure of time. If you have no fixed rule to determine whether a particular month is to contain twenty-nine or thirty days, or a particular year twelve or thirteen months, it is of no use to know the year, month, day, and hour of an old observation, unless someone has been at the trouble to compile a list showing the length that has actually been assigned to each month and each year from the time of the old observation

to the time of the new observation with which you wish to compare it. And, if the old observer has like most Babylonian observers down to the seventh century B.C. recorded only the month and day of the month with the vaguest indication of the time of day, leaving his successors ignorant of the year and the hour, even a canon of years, months and days, will be of little use. There was of course no such canon in Greece until the self-regulating calendar of Meton was invented for the purpose of providing a continuous record of time, and it is interesting to observe that Ptolemy, who generally derives his observations from Hipparchus, cites no Greek observations before the time of Meton. Of what use would they have been without such a canon to correlate them with later observations? On the other hand Ptolemy cites an abundance of Babylonian observations going back nearly to the reign of Nabonassar, in which dates are expressed in Egyptian vague years, reckoned from Nabonassar's first year (747 B.C.). There is only one possible explanation of this fact, but it would appear that so far the explanation has been missed. Someone must have compiled a canon showing the number of days that had been included in each Babylonian month and the months included in each Babylonian year from the first year of Nabonassar onwards. Probably it was a great canon, containing not only the lengths of each month, but a dated list of observations made during it. The measure of accuracy in the eighth century observations cited by Ptolemy is, as Kugler remarks, about equal to that of the better defined observations preserved on cuneiform tablets of that age. Their chief value for subsequent astronomers lay in the fact that unlike most of the Babylonian observations of that age they were carefully dated. Now if such a canon of observations was brought down to a date when it could be compared with the Egyptian vague year, it was a simple matter to convert all the dates into the Egyptian calendar, and Hipparchus naturally preferred to express the dates in the Egyptian calendar, in which all months were thirty days long and all years 365 days long, a calendar in which calculation was easy and to which in all probability his own tables were accommodated. It will be observed that the significance of the era of Nabonassar lies simply in the fact that this canon began with the first year of his reign.

With such a canon before them it was no impossible task for the Babylonian astronomers first to map out the intervals between different eclipses and next to discover that they recurred in cycles such as have been mentioned above. The eclipse of Thales (585 B.C.) was 162 years later than the accession of Nabonassar, so that by his time the Babylonian astronomers had a long series of eclipse observations at known intervals. An eclipse, unlike a new moon, could be dated to an hour by direct observation, and it is reasonable to suppose that the indications of time were steadily made more exact as the idea of seeking or testing a cycle took shape.

A difficulty has been made in the interpretation of the prediction attributed to Thales on the ground that the 'saros' gives from two to five solar eclipses for each year and provides no means of determining which of these will be total or even visible at a particular place, while, when the

'saros' does give the date of an eclipse, it gives not only the year, but the month, day, and hour.³ From this it would follow that a prediction of a solar eclipse for a particular year by means of the 'saros' is rather an absurdity, and it has been suggested by Tannery (*Pour l'histoire de la science hellène*, p. 60) that Thales picked up a number of predictions on his travels from an astrologer, and, after verifying some of them, ventured to assert one of the predictions on his own responsibility, and by a stroke of luck this prediction was fulfilled in the shape of a total eclipse of the sun visible in Asia Minor. Now it is true that a modern astronomer uses eclipse cycles merely for the purpose of discovering the dates of eclipses and, in the case of solar eclipses, of getting some vague indication of their magnitude on the earth generally. He discovers by more elaborate means whether a solar eclipse was visible at a particular place, and, if so, what its magnitude was.

But this does not mean that the 'saros' or *ἑξελκυσμός* cannot be used to make predictions for a particular place. The opposite is the case. Each *ἑξελκυσμός* brings an eclipse back to much the same hour of the day and to much the same track. A study of all the solar eclipses visible at Babylon from 700 B.C. to 556 B.C. shows that where the sun was above the horizon at the recurrence of the eclipse the local magnitude was generally much the same as it had been fifty-four years previously. A total eclipse recurs as a total eclipse, but the belt of totality generally shifts steadily northwards or southwards. If the magnitudes of the ten largest eclipses visible at Babylon at their greatest phase between 700 and 610 B.C. inclusive are taken from Günzel's *Spezieller Kanon der Finsternisse* (1899), it will be found that seven of the ten recurred after fifty-four years with the sun above the horizon. Measuring an eclipse by the proportion of the sun's diameter obscured, and reckoning the diameter according to astronomical usage in twelfth parts or digits, we shall find that four of these seven recurred at Babylon with a magnitude changed by less than one digit, and that two of the three others recurred with magnitudes changed by less than two digits. In the seventh instance the magnitude was changed by 4·8 digits, but in no case was the eclipse invisible at Babylon when the sun was above the horizon at the time of the recurrence of the eclipse. And, as the cycle tells us whether the sun will be above the horizon or not, it is really a very safe guide for the prediction of solar eclipses. It is true that the eclipse of 585 B.C. must have been foretold by means of that of 639 B.C. not that of 633 B.C., that is by the 'saros', not by the *ἑξελκυσμός*, but the fact that the time of the eclipse varies by eight hours from one 'saros' to the next, has the result that the sun is usually below the horizon at a recurrence after a 'saros' period, so that predictions by the 'saros' cycle would not be available so often as predictions by the *ἑξελκυσμός*.

³ Martin in *Revue Archéologique*, nouv. série, ix. (1864), pp. 170-190, makes much of these difficulties. Newcomb, *Researches on the Motion of the Moon*, Part I. (1878), pp.

28-30, rejected the prediction for the reason given in the text, but in Part II. of the same work (1902), p. 231, he states 'There can be little doubt that Thales predicted this eclipse.'

Solar eclipses visible at a particular place do not occur every year. Once in four years is nearer the average. There is, therefore, nothing absurd in Thales having predicted a solar eclipse for a particular year by means of the 'sauros.' He would appear from Herodotus's statement to have also predicted its totality. That of course he should have been able to do, so long as he did not venture to say where it was to be total. If, as the passage would seem to imply, he predicted the year, but not the month or day, the reason may have been that he did not know the precise date of the eclipse of 603 B.C., or that, if he knew it, he did not know how many intercalary months had been inserted since that date. He probably had not access to the Babylonian canon of years, months, and days.

If we acknowledge, then, that Thales was already in possession of a cycle of eclipses, the step to a cycle of intercalations is quite easy. A cycle of intercalations, as the Greeks understood it, has to satisfy three requirements; it must contain at once an exact number of days, of lunar months, and of solar years. The cycle of eclipses provided at once the number of days in a lunar month. The 'sauros' contained 223 lunar months, amounting to 6585½ days. This gives 29½ days for each month, a number of days which exceeds the traditional lunation of 29¼ days by ⅛ day almost exactly. This suggests a period containing some multiple of thirty-three months in order to obtain at once a whole number of days and a whole number of months. A period of ninety-nine months fulfils this requirement and is also very slightly in excess of eight solar years. Eight solar years were, according to the best science of the sixth century, B.C., 2,922 days long, while ninety-nine months of the length just determined amounted to 2,923½ days. So an approximate cycle of eight years might be made to include 2,922 days or an approximate cycle of sixteen years to include 5,847 days. Here we have what Geminus regards as the first and second forms of the octaeteris. But as has been seen, intercalation in Babylon had always been independent of cycles, and the octaeteris was certainly the result not of any civil necessity, but of a scientific appetite for a systematic rule. It does not appear that the Babylonians ever regarded it as part of their calendar system. We have seen that it was actually used from 533 to 503 B.C., and then set aside, but that may have been due to the influence of some influential astronomer, who favoured this cycle, and who ceased to advise or at all events to get his advice carried into effect after 503 B.C.

But those thirty years were just the age of Cleostratus. Then and then only could the octaeteris have been imported from Babylon to Greece, and, as in the case of the zodiac, it was Cleostratus who transplanted the idea into Greek science. His solstice observations may have had some relation to this cycle for harmonizing the periods of sun and moon, though they would be equally useful for the purpose of arranging in their proper order the annual phenomena which probably constituted the greater part of his poem.

It is curious that he should have left so slight a name and yet have exercised so great an influence. The name of Thales looms large through the tradition of Greek philosophy both among ancient and among modern writers.

His famous prediction seemed a marvellous feat of skill, but he did not transmit his science to succeeding generations, and the art of predicting eclipses had to be learned again from Babylon in the Macedonian period.

Cleostratus, like many of Earth's wisest, seems to have held no opinions and left no material for the doxographers. His poem, like many another astronomical poem, was rendered antiquated by Aratus. The signs of the zodiac survived, but others used the names and figures with greater skill. He started a fashion for making and perfecting luni-solar cycles, which provided plentiful exercise for the ingenuity of astronomers from his age down to Hipparchus, but the glory went not to him but to the authors of the cycles that were more widely current in a later age, Meton and Eudoxus. Had he not found a "vates sacer" in Parmeniscus, we might have known nothing of his two great importations of Babylonian science, for which we have to thank him the more because they were made in that last generation before Greece lost the power and the will to absorb the learning of the East. Breithaupt (*op. cit.* p. 33) at least contends with great plausibility that the references to Cleostratus in Hyginus, Pliny, and Censorinus are all derived ultimately from Parmeniscus, as the reference in the Euripides scholium professedly is. On so small a thread has hung the fame, meagre at best, of one whose work has lived when its author has been forgotten.

J. K. FOTHERINGHAM.

SOME BALKAN AND DANUBIAN CONNEXIONS OF TROY.

PREHISTORIC research shows us that in the troubled section of Europe known as the Near East there existed as early as the neolithic period several culture groups which may be classified under four heads as follows:—

- (1) The Aegean, Minoan-Mycenaean group.
- (2) The Thessalian.
- (3) The Upper Balkan and Danubian.
- (4) The South Russian and allied groups.

The first of these is so familiar that we need only emphasize its continuity from the neolithic period through the Bronze Age, and the fact that, although eventually it was widely diffused through the Mediterranean from Spain to Cyprus and the coast of Palestine, in the Aegean area itself the northern limit on the west coast was Thessaly, which it reached in the L. M. period, and on the opposite shore the single site toward the north is Troy, where L. M. is contemporary with the Vth city. The sporadic examples on the coast from Thessaly to Troy are very late and apparently had little influence.

The excavations by Messrs. Wace and Thompson in prehistoric Thessaly, which included considerably more than one hundred sites, have led them to differentiate a large number of styles of pottery, including red monochrome, red or black incised, or else painted either light on dark or dark on light in many varieties.¹ The designs are predominantly rectilinear and more closely akin to the northern groups than to the Minoan. These styles extend from the Neolithic, through Chalcolithic to the Bronze Age, with gradual changes and no violent break until the close of L. M. III. This tallies with what had already been known of Minoan influence on the Thessalian coast. The terracotta figurines are also quite different from the island or Aegean type and belong to the short and stumpy styles of the mainland.² The excavators believe that except for the Crsto-Mycenaean vases (L. M. II. and III.) there seems to be hardly any direct connexion between Thessaly and the south-eastern regions of the mainland,³ neither did the Cycladic (Island) styles have much influence.⁴ Even when at the close of the Minoan period

¹ Wace and Thompson, *Prehistoric Thessaly*, pp. 13-23.

² *Ibid.* p. 232.

³ *Ibid.* p. 225.

⁴ *Ibid.* p. 226.

that civilization came into contact with Thessaly, it did not replace the local wares but continued side by side with them and what influence there was resulted in a somewhat hybrid style.¹

It is, therefore, not to the south but to the north that the excavators have looked for connexions with Thessaly.²

On the basis of a few sherds, one cup and one bowl, Dr. Tsountas is inclined to note a relationship between Thessaly and Troy, but Messrs. Wace and Thompson do not agree with this view and regard the Trojan vases as unlike the Thessalian in most respects.

The occurrence of Minyan ware at Troy VI and VII, and in Thessaly need not prove any direct communication although it may be inferred. The origin of Minyan ware is still uncertain.³

The Thessalian pottery seems to be affiliated with the north Balkans through a ware which may possibly be of Macedonian origin.

Adequate information is not yet to hand about Macedonia, but so far the connexions of Thessaly lie northward. The figurines have their closest analogies in Thrace and the decorative motives of the Dhimni ware, a combination of spiral and geometric, unite Thessaly with Thrace, Roumania, Galicia, Bessarabia, and South Russia.⁴

Thessaly continued in the neolithic or sub-neolithic period when the Aegean and the Serbian-Troy areas had reached the Bronze Age. Troy, which was situated on very important trade routes (as we shall see later), was connected with the Anatolian district on the east, and on the west through Serbia with other parts of Europe, but Thessaly lay too far south for this line.⁵ She was also off the Mycenaean trade routes, thus forming an isolated sort of backwater between these two great metal-using areas, and serving as a buffer State to keep central and southern Greece protected against the Danubian peoples. Later on, when the Mycenaean people removed the barrier (by trade or conquest),⁶ or when the restlessness and pressure from the rear sent more and more invaders into the Greek peninsula, Thessaly was in their path and many of the northerners followed that route. In fact, in the days of the Achaeans, Thessaly was one of the

¹ *Ibid.* p. 227.

² *Ibid.* ch. xiv.

³ Mr. R. J. Forsdyke (*J.H.S.* 1914, pp. 126-130) regards it as a Trojan fabric, and suggests that Greece was once a Trojan province and that the Trojan War records a struggle for the possession of both sides of the Aegean. He believes that the power which kept the Minoans from the coast of Asia Minor was a people whose most formidable site was Troy.

This brilliant and interesting hypothesis can hardly be maintained since the Minyan ware has not been proven Trojan, there are no remains like the Trojan anywhere along the coast of Asia Minor, and the theory runs counter to a great deal of archaeological

evidence both in the Cyclades and on the mainland of Greece.

Mr. V. G. Childe's study (*J.H.S.* 1915, pp. 190-207) of the stratification at sites in Phocis which show Minyan ware in all stages of development leads him to believe the vases were not imported from Troy. Neither does he believe in a Trojan conquest, but he thinks that Minyan ware, if made in Troy, could have been passed along via the northern Cyclades where some finds in Syra and Naxos similar to Troy II-V, show that contact had been established.

⁴ Wace and Thompson, *Prehistoric Thessaly*, p. 232.

⁵ *Ibid.* p. 231.

⁶ *Ibid.* p. 249.

great centres of the Hellenes, and it is quite possible that the shaggy Pheres and barbarous substratum which Homer suggests afford a real hint of internal wars. The contrast between north and south Greece which we find in Homer corresponds with the facts so far as we know them. An interesting by-product of the discussion of Thessalian civilization is a suggestion about the Pelasgians. There is no intention of entering on the Pelasgian controversy at this point particularly in the face of the most reasonable explanation made by Dr. Leaf,¹¹ but if Pelasgian implies ancient, out-of-date and uncivilized, it well describes the Thessalian people, the barbarous Pheres, Magnes and Centaurs. The crude remains, such as the ithyphallic and steatopygous figurines, point in this direction. It seems at any rate a great mistake to make Pelasgian equal Mycenaean as Professor Ridgway does, for Wace and Thompson show that the most Pelasgian spots are exactly those which are the least Mycenaean.¹²

Father Browne¹³ mentions the fact that there is a gap in Homer's geography which corresponds to Macedonia and that the poet knows the Trojan-Thracian group and the Greek, but not that which comes between.

There is a corresponding blank spot in Homer's Asia Minor (all along the coast) explained as the probable possessions of the Hittites, whose power had been flourishing since Minoan days and had prevented the Cretan mariners from settling in numbers on that littoral.¹⁴

One need not suppose an equally powerful people on the Greek side of the Aegean, and Father Browne suggests that this north-western gap may indicate a thrust of barbarians whom the bards either did not know or preferred not to recognize.

I think if there is a blank spot in Homer's record it lies farther south, as Macedonia is accounted for by the Paconian albae who formerly occupied more territory than they did in historical times. And while it is still premature to say much about Macedonia, the excavations tend to bridge over the gap between Thrace and Thessaly. Thessaly, rather than Macedonia, appears to have been the backward barbarous area.¹⁵

It is not, however, with the Aegean or Thessalian areas that this paper proposes to deal, but with the peoples who inhabited the Danube Valley and kindred regions.

In the interesting eleventh chapter of *The Discoveries in Crete*, Professor Burrows gives an admirable summary of the finds in certain districts of South Russia and its vicinity, an area which he compares to a triangle the base of which extends from Kiev to northern Bohemia, the western side

¹¹ Leaf, *Trag.*, *A Study in Homeric Geography*, ch. vii.

¹² Wace and Thompson, *Prehistoric Thessaly*, ch. xvii.

¹³ Browne, *Handbook of Homeric Study*, pp. 175, 282.

¹⁴ Hogarth, *Ionia and The East*, pp. 47, 101, 102.

¹⁵ According to Wace and Thompson (op.

cit. App. L p. 258) the Thessalian pottery connected with Moldavia belongs to Th. II., that connected with Serbia to Th. III.; it is therefore possible that there was once connexion between the Thessalian and Moldavian areas and that later the Serbian style split this area and extended over to Troy. This would account for the degeneration in the later Thessalian periods and also at Cucuteni.

through Austria to Trieste and Bosnia, the eastern through Podolia and Bessarabia into Roumania; an east-central line comes through Bukovina and Transylvania, a west-central line through Hungary into Serbia. The eastern line may be extended through Eastern Roumelia, Troy and Yortan in Mysia.¹⁰

Not all the culture in this area is of exactly the same type, and it may be classified as indicated on the map (Fig. 1), which shows the close relation-



FIG. 1.—DISTRIBUTION OF PAINTED AND INCISED WARE.^{10a}

- Painted pottery of Kiev/Tripolje type.
- Painted pottery of similar styles.
- △ Incised pottery.
- ⊠ Both painted and incised wares.

¹⁰ Burrows, *The Discoveries in Crete*, ch. xi, pp. 184, 185; Minns, *Scythians and Greeks*, pp. 132-142; Wace and Thompson, *Cl. Rev.*

1909, pp. 233-238.

^{10a} Salonika should be marked ⊠.

ship between Troy and the Balkan district in what Professor Myres has described as the Great Diagonal Line.

The first group, marked on the map by squares, shows the area of the remarkable polychrome painted pottery with spiral and naturalistic designs which belongs to the neolithic period, side by side with the incised fabrics which ordinarily characterize that age. This group may be further subdivided into:

- (1) The Kiev-Tripolje culture, and
- (2) The sites with pottery of similar styles.

The first is marked by solid squares, the others by hollow squares: those which lie furthest west have fewer points in common with Kiev than have the Galician sites.

The areas about Kiev, often described as the Tripolje culture (from Tripolje which is forty miles below Kiev on the Dniepr) are arranged in circular groups on high ground which slopes to the water on the south side. These areas were dug out to a depth of from two to four feet and are rectangular in shape, varying from five to ten yards in length and from six to eight in breadth, or occasionally as large as twenty by twelve. The walls were of wattle and clay, sometimes whitewashed and painted red or adorned with a cornice. The floor was apparently of hardened earth and the many lumps of clay which were strewn over it may have been parts of the roof. Amongst these clay fragments were found pottery of distinctive types to be described later, axes of horn or flint, sling stones, grinders, shells, bones of animals, tortoise shells, and small clay figures 'that distinctly recall those from Hissarlik'.¹⁷

Characteristic shapes of pottery are the opera-glass, and conical pots with a foot or with angular outline. Spirals or wavy patterns in ribbon-like effects are made by four or five parallel grooves or else painted in reddish or brownish colour on a yellow or red ground.¹⁸ Leaf designs are painted in brown on white or cream, and sometimes a light-coloured design is outlined in brown or black.¹⁹ The rare human figures recall the Dipylon style but are less attenuated.²⁰ The figurines show progress from cruciform or slab-like idols to well rounded forms. Many have bird-like faces.²¹ Although most of the axes are of stone, copper is beginning to be used.

It seems improbable that these areas can have served as dwellings as there are no remains of food, discarded pottery, or a permanent hearth. Chvoïka believed them to be tombs, although no bones have yet been found. Later discoveries, however, have furnished evidence of both cremation and inhumation.²²

Podolia and Petreny belong to this group. One vase from Podolia represents goats, a deer and a dog on the upper zone. Others have backgrounds of black, light brown, yellow or grey with spirals and curves

¹⁷ Minns, *op. cit.* pp. 133-140; Figs. 28, 31.

¹⁸ *Ibid.* pp. 133-139; Figs. 29, 30, 32.

¹⁹ *Ibid.* Fig. 30.

²⁰ *Ibid.* Fig. 32.

²¹ *Ibid.* Fig. 33.

²² *Ibid.* p. 140.

in white, red, orange or brown.²⁰ The same colours and patterns occur at Petreny where in some cases the designs have been painted in black or violet brown on the natural red or yellow surface of the clay; in other instances there is a slip of red or brown (polished) or yellow or white (dull). Though the animals and human figures are not so good as at Tripolje or Podolia, the general effect must have been rich and varied. Knobs and small handles are found, but there is little incised work.²¹

This pottery may have been evolved in Russia or have been derived from elsewhere. Some scholars advocate an Aegean origin, but as far as one can judge from illustrations the resemblances are slight.

It seems rather strange that so much effort has been wasted in endeavouring to derive either the Aegean styles from the Russian-Danubian or vice versa. Both sides of the case have been well summarized by Professor Burrows,²² and the third view, namely, that of a parallel and independent development, is also presented. This is the view preferred by Dr Hoernes²³ and Messrs. Wace and Thompson²⁴ and appears the most reasonable explanation. Besides the fact that there is almost nothing common to the two except painted pottery and the spiral, there is the fact that between them there intervenes a fairly broad zone which includes Thessaly and the upper Balkans, each with rather distinctive styles of their own, and had this painted spiral motive passed through the Balkan peninsula either in a northward or southward direction, it surely would have left some traces. There remains the alternative of a sea-route, but insuperable objections to this are that few traces of Aegean civilization have been found on the coast anywhere between Volo and Troy, and no remains of Minoan pottery in South Russia or Thrace, and that it would have had to pass right through the Serbian-Trojan zone.

In any case, we find it superior in style to most other places in the neolithic period. As in Scandinavia the isolated position allowed fuller development of the neolithic technique in stone objects, so here the lateness of the knowledge of metal afforded the neolithic artists opportunity to develop the pottery which was their forte. Dates are hardly safe, or perhaps even desirable, but Niederle's suggestion²⁵ that it belongs to about 2000 B.C. seems a reasonable one. Of course the Aegean area had been using metal long before this, but there is no reason why even at the height of M. M. this district could not still have been in the stone age. While the origin is still obscure the affiliation is close with Transylvania and Galicia, where the sites at Bilaze Zlote²⁶ and Horodnica²⁷ furnish many beautiful examples of painted pottery in the Kiev style. These are described by Hoernes as

²⁰ *Ibid.* p. 140, Fig. 31.

²¹ *Ibid.* pp. 140, 141.

²² Burrows, *Discoveries in Cretæ*, ch. 41, pp. 184-186.

²³ Hoernes, *N.F.O.* pp. 126-128 (in Burrows, p. 194).

²⁴ *Q. Rev.* 1909, p. 238; *Prehistoric Times*

vol., p. 234 and Appendix I, pp. 257, 258.

²⁵ *Slav. Ant.* 1, p. 400, quoted in Mühl, p. 142.

²⁶ Hoernes, *Urgeschichte der bildenden Kunst in Europa*, p. 291, Fig. 2; p. 315.

²⁷ *Ibid.* p. 313.

'Ukrainian' and include the characteristic opera-glass, the variations of spiral, and use the same rich colours. Another Galician site, Koszylowce,²¹ has grey incised pottery and painted ware. Its neolithic period is said to furnish many resemblances to the Thessalian and to afford a close parallel to Butmir.

In the Carpathian district or Transylvania, where both the incised and painted styles occur, Tordos and Kronstadt are two of the most fruitful sites. At Tordos the pottery designs are rectilinear and spiral, red or violet-red on a yellow-ground. In terracotta there are small short-legged animals and female idols with arms horizontally outstretched or placed on the body.²² Kronstadt²³ furnishes many examples of pottery in which the straight and curved bands are drawn with great neatness and exactness. Although white on dark occurs, the converse technique is much more general. As at Tordos there are many figures of animals and female idols, but the Kronstadt variety is very steatopygous and fat in the legs. The breasts are small, the navel and knee caps modelled in relief and the head often pierced through with holes. In Roumania Cucuteni (near Jassy) affords some good examples of polychrome styles.²⁴ The earlier neolithic group includes a large number of the fruit-stand type whose shape and certain features of whose decoration recall the wares of Thessaly II., but are by no means identical and may easily be distinguished, since those from Cucuteni are dull and dusty while those from Thessaly are polished. The later vases which belong to the Chalcolithic or early Bronze Age recall those from Petreşti in the use of spirals, and in the placing of the decoration on the upper part of the pots which slope rapidly to a small base.

The terracotta figures from Cucuteni are very striking: the upper part of the body seen in profile is flat and slablike, the head insignificant, and the steatopygy very marked; seen from the front or back they are broad shouldered and broad across the hips. They are covered with incised decorations, spiral and meander motives, curving lines, semi-circles and a peculiar arrangement giving the effect of drapery drawn very tight about the lower part of the body.²⁵

These sites then furnish a group which, though not homogeneous, is closely affiliated. When we cross the Danube into Bulgaria we find connexions with Serbia and Bosnia and also with the group just described.²⁶ There are incised wares with a combination of spiral and geometric designs, parallel lines in ribbon style, impressed chequer patterns and, less commonly, painted ware akin to the Moldavian and some use of graphite technique;²⁷ there are flat bone idols with incised decoration²⁸ like the clay Ukrainian

²¹ Hadaczek, *Les Monuments archéologiques de la Galicie* (review and summary in *J.H.S.* 1915, p. 133).

²² Hoernes, *op. cit.* p. 305.

²³ *Ibid.* p. 307, Figs. 4-8.

²⁴ Wace and Thompson, *Prehistoric Thessaly*, p. 257.

²⁵ Hoernes, *Urgeschichte*, p. 300, Figs. 1 and 2.

²⁶ Seure and Dugrand, *B.C.H.* 1906, pp. 359-432, with 72 illustrations.

²⁷ Wace and Thompson, *Prehistoric Thessaly*, p. 258.

²⁸ *B.C.H.* 1906, p. 415, Fig. 57.

idols,³⁹ figurines reminiscent of the Cucuteni⁴⁰ and Russian⁴¹ styles as well as seated figures covered with incised designs whose relationships cannot yet be determined.⁴² One rather interesting fragment of a terracotta shows the upper part of a bird, presumably an owl, whose eyes are ellipses with a straight line through the centre, the mouth a cross, the nose beaked, the plumage incised. It is suggested that it may be meant for a human being clad in an animal's skin, as we learn from Xenophon and Herodotus that the Thracians dressed in this fashion.⁴³

Bulgaria then seems to have some relation to the Moldavian district north of the Danube and some with Serbia. Messrs. Wace and Thompson point out that in the Sofia museum are many weapons of the usual central European shapes. The bored celts which may imitate metal axes are characteristic of Troy as well and indicate a connexion between Troy and the central Danube valley, but as Troy affords no examples of Moldavian painted pottery the trade route probably branched off and followed the route taken later by the Roman road from Nish to the Hellespont. In Bulgaria the principal finds have been on the Danube at Rasgrad and near Silistria; in the Shumla district, at Jamboli and Tell Ratcheff near Jamboli; and at various sites near Philippopolis.⁴⁴ In the Shumla district the painted Moldavian pottery is more frequent than near Philippopolis where incised wares are particularly plentiful. The wares of Ratcheff and Matchkur are, however, said by Messrs. Seure and Degrand to be almost identical, although the examples at the latter are a little more carefully done.⁴⁵ These authors particularly note the resemblances to the Bosnian and Serbian fabrics.

The so-called Tomb of Protesilaus, two and a half miles north of Sedd ul Bahr across the Hellespont from Troy, and the adjacent gardens were strewn with thick lustrous pottery characteristic of Troy I; in the tomb were fabrics of Troy I. and II. styles, stone axes, hammers, querns and balls, a small bronze knife and baked bricks like those from the second and third Trojan cities.⁴⁶ This was the only tamulus in which Trojan pottery was found by Schliemann, but later discoveries in Thrace and Bulgaria have furnished more examples. These help to confirm the statements of Herodotus and Strabo about the connexions between the Phrygians and Trojans and the migrations from southern Europe to Asia. Phrygians and Mysians had both taken the Bosphorus route and had left at home in their native Thrace certain of their kinsmen known later as Bryges and Moesians.⁴⁷ Quite probably the expansion of these tribes into North-western Asia Minor was part of the same movement which drove their kinsmen the Achaeans southward into the Greek

³⁹ Hocimers, *op. cit.* p. 317, Figs. 1-3.

⁴⁰ *Ibid.* p. 317, Fig. 4 (from Vidbol in the Vitis district).

⁴¹ *B.C.H.* 1906, p. 300, Fig. 25; p. 301, Fig. 26; p. 414, Fig. 56.

⁴² Hocimers, p. 319 (from near Philippopolis); Wace and Thompson, *Prehistoric Thessaly*, p. 238; Wace and Thompson, *ibid.* p. 235, Fig. 4.

⁴³ *B.C.H.* 1906, p. 374, Fig. 9, and note 2.

⁴⁴ Jérôme, *Rec. Arch.* 1901, pp. 328-349 (Jamboli); Seure and Degrand, *B.C.H.* 1906, pp. 369-432 (Tell Ratcheff, Tell Matchkur and other sites near Philippopolis).

⁴⁵ *B.C.H.* 1906, p. 349.

⁴⁶ Schliemann, *Troja*, pp. 254-262.

⁴⁷ Herodotus, vii. 73.

peninsula.⁴⁸ The centre of distribution evidently lay somewhere in the district towards the Danube and the lines forked off from each other so that the Achaeans went southward to the west of the Phrygians. Strabo⁴⁹ says also that the Phrygians passed from Thrace, killed the king of Troy and settled here, that there was much competition for the rich lands and that this had all happened before the Trojan War. Homer's Phrygian allies come chiefly from Asia Minor. The Phrygians seem to have had connexions to the south-westward also, as the Bryges belonged to Macedonia and according to Strabo⁵⁰ the Paenionians were a colony of the Phrygians.

Bulgaria forms an easy transition to Group 4, the Bosnian-Serbian-Trojan line (marked with a triangle). Here the pottery found with neolithic objects is not painted but incised or stamped, though the designs include spiral and curvilinear as well as rectilinear motives. Figurines of human beings are very plentiful; they are mostly female and commonly steatopygous. Bihac and Butmir represent the western extremities of this line, which extends through Serbia, particularly along the Danube as far as Radujevac, including the noteworthy sites of Kličevac and Zuto Brdo, and in the Morava valley as far as Nish.⁵¹ In this district Vinča and Jablanica are especially important stations. At Butmir the spiral, curved, straight or rectilinear designs are incised, dotted or stamped on the soft clay of the handmade pottery. Among the figures the simplest form is a slab-idol with outstretched stumps for arms; others end in pedestalled bases instead of arms, legs or feet. The necks are long, the faces inclined backward and have sharp noses, no chins, sloping foreheads, eyes with heavily ridged brows which often form a T with the nose. Incised patterns are frequent on the torsos, which are generally nude, although sometimes they seem to have a garment fitting tightly about the hips or are adorned with necklace and garlands in dots.⁵² At the Bosnian pile village of Ripac near Bihac and at Gresine on Lake Bourget have been found hermaphroditic terracottas, and at Ripac also pyramidal aniconic idols.⁵³

In Serbia along the Morava valley there are remains of dwellings more or less rectangular in plan and constructed of wattle and clay.⁵⁴ The incised designs on the pottery are both rectilinear and spirals, the closest affinities are with those of Butmir and the Pannoman group of Hoernes. Another favourite technique was decoration by impression or stamping and a third was 'highly polished black designs applied to the surface of the vase on the greyish-white slip' (evidently the graphite style). The incised decorations of the late periods are often filled in with white,⁵⁵ e.g. Kličevac. Although the well-known figurine from Kličevac is familiar through illustrations, the significance of the site as a whole cannot be too frequently emphasized.⁵⁶

⁴⁸ Leaf, *Homer and History*, pp. 72, 73.

⁴⁹ Strabo, xii. 8. 3, 4.

⁵⁰ *Ibid.* iv. 38.

⁵¹ Vasata, *B.S.A.* xiv. pp. 319 ff.

⁵² Hoernes, *op. cit.* pp. 281, 283, 287, 289.

(1-3).

⁵³ *Ibid.* p. 53, Nos. 1-8; p. 204.

⁵⁴ *B.S.A.* xiv. p. 320.

⁵⁵ *B.S.A.* xiv. pp. 320-328 (pottery).

⁵⁶ Vasata, *Rev. Arch.* 1902 (3 ser. tome xl.),

pp. 172-190.

The red or black pottery incised and filled with white puts this site into connexion with places from Bosnia to Troy. Dr. Vassits is inclined to value it for the combination of what he identifies as geometric and Mycenaean elements although the spirals which he derives from Mycenae are characteristic of the very group marked with a triangle on the map.

The neighbouring site of Zuto Brdo⁵⁷ is rich in figures with incised decorations and hand-made vases, dotted, stamped or incised in the usual style. While at Klčevac some metal occurs even in the lower strata, a true neolithic station is Jablanica⁵⁸ which Dr. Vassits says stands in the same relation to Klčevac as pre-Mycenaean to Mycenaean. Even he sees no southern influence here and the affinities with the other sites in this group are remarkable, especially with Kubin in Hungary, Bosnia, Troy and Bos-Ojuk. This is clearly one of the most important sites which has yet come to light. Professor Myres⁵⁹ regards it as a site of the utmost significance, enabling one to fill in a missing link between neolithic Butmir and Troy since hitherto there had been only the Thracian tumuli which were too near Troy to be really intermediate. M. Reinach⁶⁰ calls it another link in the chain which connects Bosnia to the Troad and Phrygia, Hungary and Kiev. This he regards as a unified civilization with local differences, but thinks that an attempt at an ethnic name like Thracio-Illyrian or Phrygo-Scythian would be premature. It is with some diffidence that I venture to disagree with this distinguished authority, but it seems to me that the difference in the two groups is clearly marked, although there doubtless was contact between them.

The classification of about 1,000 statuettes in the Belgrade Museum shows that they extend from the earliest nude figures with flat triangular faces to the decadent type with bird's head and monstrous nose. Incision is plentifully used to mark the features, necklaces and clothing on the later examples. Standing figures wear a garment like two loin-cloths, square in cut, hanging from the belt, sometimes drawn like a sheath about the hips as at Cucuteni, or with ends hanging in front fastened to the belt with buttons which are represented by little clay knobs. Horizontal bands around the leg may represent boots. A fragmentary bone statuette recalls those from Bulgaria, Troy and Thessaly.⁶¹

The attempt made by Dr. Vassits to prove direct connexion between the Aegean and the Serbian cultures must be regarded as a failure; the affinities of Serbia certainly seem to lie elsewhere.⁶²

We may tabulate Groups 3 and 4 as follows:—

I. North of the Danube:—

A. East of Carpathians:

1. (a) Kiev—Tchernigov—Tripolje—Poltava—Kherson in the Dniepr valley,

(b) Podolia—Petreny—in Dniestr,

⁵⁷ Vassits, *Rev. Arch.* 1908 (4 ser. tome 21.), pp. 205-210.

⁵⁸ Vassits, *Rev. Arch.* 1902, p. 184; *Archiv für Anthropologie*, vol. 27 (1902), pp. 518-522.

⁵⁹ *Mon.* 1905, No. 41, pp. 78, 79.

⁶⁰ Reinach, *L'Anthropologie*, 1901, pp. 507 ff.

⁶¹ *B.S.A.* xiv, pp. 221-228.

⁶² Wace and Thompson, *Cl. Rev.* 1900, pp. 209-212.

2. Galicia (headwater of Dniestr),
Cucuteni, Pruth,
Bukowina, ..

B. West of Carpathians:

1. Transylvania: Tordos,
Kronstadt.
2. Pannonian: Lengyel,
Attersee,
Mondsee,
Friede.

II. In the Danube Valley or South of Danube:

1. Bosnian: Butmir,
Bihać.
2. Serbian: Danube,
Morava.
3. Bulgarian: Rasgrad, Silistria—on Danube,
Shumla;
Sultan Selo—Upper Maritza, W. branch,
Jamboli—Upper Maritza, E. branch (Tundja),
Philippopolis.

To sum up: to the north of the Danube the culture along the valleys of its tributaries like the Pruth and the Theiss is closely akin to that in the neighbouring river basins of the Dniepr and the Dniestr; on its southern side as well as along its tributaries the Save, the Drin and the Morava, the connexion is with the Bosnian group. Bulgaria seems to have been the meeting place of both civilizations.

But in order to discuss the connexions with Troy, where the remains of the second city afford many close resemblances to this fourth group (triangles on the map), and where the Balkan-Danubian connexion becomes again evident in the seventh city of the Early Iron Age, we must consider the possible routes from the southern bank of the Danube to the Aegean area.

There are three of these, access to all of which is via the Morava. Following up this river to Nish one may go through the mountains and (1) down the Maritza, (2) down the Strymon or (3) across the watershed and down the Axios or Varlar. The first of these routes was taken by the Roman road and also by the Orient Express, and it leads into the parts of Bulgaria where remains have been discovered on both the upper branches of the Maritza as well as nearer to its mouth in the Aegean, whence there is an easy connexion with Troy. The Strymon route seems not to have been as important as the others in ancient or modern times and the unsettled conditions in the country have made excavations impossible. It is not so accessible from the headwaters of the Morava but can be reached with little difficulty and is one of the natural outlets from near Sofia to the Aegean in spite of the elevation of the land through which it flows for part of its course.

The map of present and projected railways⁵² shows that a road has been proposed through this valley.

We shall have to regard it as a route of secondary importance along which there is no good road even now, putting the Orient Express route and the Morava-Vardar route as the two really significant passageways. The Romans seem not to have utilised the Axios valley, which was natural enough as they were not so much concerned with north and south as with east and west. Their point of departure was Dyrrachium, thence north-east to Naissus and south-east to Byzantium, roughly two sides of a triangle the base of which was formed by the Via Egnatia, which went as nearly due east and west as the character of the country allowed. As far as Pella or Thessalonica it must have been an exceedingly difficult and uncomfortable journey, but east of the mouth of the Axios it followed the coast in the narrow strip lying south of Rhodope. For various reasons it seems that such a caravan route must have existed from a very remote period, or at any rate from the days of Homer, as we shall see.

The great Morava-Vardar route has been from time immemorial the corridor between the Danube and the Aegean, whether the tide of travel set from north to south, as in the case of the earliest invaders, or from south to north, as in the case of our allied armies. It would be absurd to think that the civilization which extended up the Morava stopped short at Nish and did not go down the other side of the mountains via the Axios. 'Macedonia,' to give it its old name, is sure to be a rich field for excavators, for the travels of Messrs. Wace and Thompson⁵³ have brought to their notice a fairly large number of tumuli and settlements in the Salonica district alone. Their researches in Thessaly had fixed the Vale of Tempe as the northern boundary of the Thessalian culture, although sporadic examples of the wares had been found in Thrace. That northern boundary has now been pushed as far as the Haliacmon valley where sherds of Thessalian I. and II. were discovered at Serfije, while the investigations in the vicinity of Salonica make it probable that Macedonian culture partook of the character of its neighbours both to south (Thessaly) and to north (Danube-Balkan). In this neighbourhood they observed thirty-four funeral tumuli of a type unknown in south Greece but common in Thrace and extending also to Pergamon and to Karteh, and twenty-six prehistoric settlements furnish painted pottery which resembles the Thessalian II, III and IV, as well as a thin spreading of L. M. III. of a type identified as mainland (not Cretan). There is also incised pottery of a simple geometric type, but according to Mr. Wace there was not enough of it to tell its relations to Thessaly, Thrace or Bosnia.⁵⁴ These excavations are as yet unpublished⁵⁵ and one must not draw premature

⁵² Newbigin, *Geographical Aspects of Balkan Problems*, Fig. 7, p. 103; Johnson, *Topography and Strategy of the War*, ch. xiii.; Hogarth, *The Near East*, ch. xiii. p. 210, Fig. 44.

⁵³ Wace and Thompson, *Liverpool Annals*, II. (1900), p. 159 ff.; Wace, *B.S.A.* xx. pp. 122-122.

⁵⁴ Wace, *B.S.A.* xx. p. 129.

⁵⁵ Carried on by Maerdyk Bey.

conclusions, but we can at least connect Macedonia with Thessaly, Thrace, Serbia and Bosnia.⁶⁷

Before considering the connexions between Troy and this area we may note that the Bosnian-Serbian line does not stop at Troy. Yortan on the upper valley of the Caicus in Mysia⁶⁸ and Bos-Ojuk near Phrygian Dorylaion on the Sangarius⁶⁹ have furnished pottery similar to the Trojan, although some weapons of bronze show that the former site belongs to the Chalcolithic Age.

Mr. Ormerod's recent discoveries have added several sites which show some connexion with Troy and the Balkans.⁷⁰ From Thyatira a seated female figurine with flat disc-like face and crossed bands on the breast recalls the lead figurine from Troy as well as one from Selendi (near Thyatira), and is even reminiscent of Bosnia,⁷¹ and three small vases with animals' heads and beaked forms are said to come from this vicinity.⁷² Further researches in northern Lycia, south-western Pisidia and southern Phrygia have supplied important material.

Tchai-Kenar⁷³ near the Taurus is connected with both Troy and Cyprus by its pottery which includes burnished black, red-glazed and black-glazed incised wares which belong to the first and second cities at Hisarlik, and 'red Cypriote' painted ware of the early Iron Age. There is also some degenerate Mycenaean tradition and some non-Aegean influence which may perhaps have come via Cappadocia from the geometric areas of Western Asia. Two flat little headless figures of coarse white marble from this vicinity are difficult to assign to any particular group, but perhaps belong to the Island type.⁷⁴

On the basis of the pottery from Senirdje⁷⁵ (near Isbarta in north Pisidia) which is chiefly dark grey burnished ware like that from Cyprus and Hisarlik in general style and shapes, decorated with broad, flat scorings, little lumps, or flutings, or rarely with incisions filled with white, the Hellespontine—North Phrygian area is extended further south-eastward. Similar pottery was found at Bomarhashi Gölü⁷⁶ (near Apamea) together with five early bronze implements, two flat celts, two Cypriote daggers and one unfinished object, presumably a celt.

Other connexions are suggested by two small stone steatopygous figures from Telukurkend,⁷⁷ as this type does not occur at Troy, or at Yortan (where the figures are flat) nor is it characteristic of the Aegean in spite of a few examples. It is, however, as we have seen, very common in south-west Europe, Thrace and Thessaly.

⁶⁷ See Professor E. A. Gardner in *The Times Literary Supplement*, March 29, 1915.

⁶⁸ Burrows, *op. cit.* p. 185 (note 12).

⁶⁹ Kourts, *Atk. Mit.* 1899, pp. 1-45; Pl. I.-IV.

⁷⁰ Ormerod and Woodward, *B.S.A.*, xvi, pp. 76-126; Pls. VII, VIII.; Ormerod, *B.S.A.*, xviii, pp. 80-94; Pls. V.-VII.; *B.S.A.*,

xix, pp. 48-60.

⁷¹ *B.S.A.*, xix, pp. 54-56, Fig. 3.

⁷² *Ibid.*, p. 56, Fig. 4, a, b, c.

⁷³ *B.S.A.*, xvi, pp. 94-103.

⁷⁴ *Ibid.*, p. 105; Pl. VII, Nos. 18 and 19.

⁷⁵ *B.S.A.*, xviii, pp. 80-91.

⁷⁶ *Ibid.*, pp. 91-94.

⁷⁷ *B.S.A.*, xix, pp. 48-52, Fig. 1.

A flat, slablike torso of bucchero with crossed incised bands and punctured decoration from Kul Tape near Caesarea recalls the Tehai-Kenar figure published by Mr. Peet, and the flat marble figures from Fulga in the Istanos plain, and may be a crude example of the violin-shaped type found in the Cyclades and Hissarlik and at Yortan.⁷⁷

To sum up, the line may be extended south-east on the evidence of the pottery and figurines while at the same time a counter-influence from Cyprus was making itself felt. We are hardly yet in a position to tell which came first. Certainly the Cypriote influence continued into the Iron Age. Dr. Leaf,⁷⁸ when discussing the Lycians among the Trojan allies, lays great stress on their commerce, which he believes was carried on principally by sea (see Map, Fig. 2), but for other purposes the overland route was doubtless



FIG. 2.—TRADE ROUTES CONVERGING ON TROY.

- (1) Paphlagonians and Halizones ————
- (2) Mysians and Phrygians —————
- (3) Maeonians, Carians and Lycians — · · · · ·
- (4) Thracians and Paenians ————

used. Elsewhere⁷⁹ he has some very instructive remarks about the difference between routes for commerce and for other purposes which should be borne in mind when one is tempted to a hasty conclusion as to one (and only one) way to reach a place. Naturally it all depends on what you want to transport.

Long ago Professor Myers pointed out the connexions between Cyprus and Hissarlik and suggested an overland route. Hissarlik combines

⁷⁷ *Ibid.*, pp. 59, 60, Fig. 6.

⁷⁸ *Leaf, Troy*, pp. 308 ff.

⁷⁹ *Leaf, B.S.A.* xviii, pp. 301-313.

European and Asiatic, Danubian and Cypriote elements in pottery, implements, bronze and copper.²¹ The recent discoveries have gone a good way towards confirming this view and give us milestones on the route.

Contemporary with the Balkan neolithic period was the second city at Troy with its face-urns, its jars with suspension holes, its white-filled incised pottery, its wealth of metal—copper and bronze and the golden royal treasure—as well as the continued use of stone, which bears witness to foreign trade extending from Melos to China, its northern type of megaron and the evidences of great prosperity of the city during its long occupation.²²

An important point to be noted regarding strata II—V, which succeeded the great second city after its destruction by fire is the possible indication of the first arrival of a fresh civilization before the end of Period V., when painted pottery makes its first appearance.²³

The sixth city is of course contemporary with L. M. and was destroyed in the Trojan war. In the seventh stratum there are records of fusion of the successors of the older city with another wave of invaders. Early Greek geometric pottery is found with crude barbarous 'knob ware' and with metal axes, hammers, chisels, needles and rings which are neither Trojan nor Greek, but typically Danubian. These may perhaps be attributed to the Treres, a Thracian tribe, who with the Cimmerians crossed the Bosphorus in post-Homeric times, probably about the eighth century. A mould for a battle-axe of Danubian type shows that these people were metal-workers and practised their art at Troy itself.²⁴

If we turn next to the testimony of Homer we shall see that the valleys of the Strymon and the Axios belonged to the Paionians who were numbered among the allies of the Trojans. The Map (Fig. 2) shows in graphic form the four lines which Dr. Leaf takes to 'represent the four trade routes which converged on Troy,' starting from the four groups of allies given in the Trojan catalogue.²⁵

The three of these which lie in Asia Minor need only passing mention; they are (1) the Paphlagonians and the Halizones from far-away Alybe who dwelt along the shore of the Black Sea, tapped the country lying to the south and shipped their goods via the Bosphorus and the Hellespont.²⁶

(2) There were the Mysians and Phrygians, the near neighbours of the Trojans, who lived up in the back country and who had doubtless crossed from Thrace at a remote period.²⁷

(3) There were the Maeonians, Carians and Lycians, who probably were traders rather than fighters and who followed a line up the coast inside the islands by what was known as the 'inner lead.'²⁸

(4) Another group of lines which led to Troy particularly concerns us.

²¹ Myres, *J.A.I. Nov. 1897*; *Catalogue of Cyprus Museum*, pp. 17, 18.

²² Leaf, *Troy*, ch. iii, 60-89.

²³ *Ibid.* p. 84.

²⁴ Leaf, *Troy*, pp. 102-112.

²⁵ *Ibid.* p. 270.

²⁶ *Ibid.* pp. 278-296.

²⁷ *Ibid.* pp. 297-304.

²⁸ *Ibid.* pp. 305-311.

'But Akamas and Peiroos led the Thracians, even all them who are bounded by swift-flowing Hebrus.

'And Euphenos was captain of the war-like Kikones.'

'Pyraichmēs led the Paenonians of the crooked bow from far-away Amydon, from the wide-flowing Axios, Axios whose water is the fairest that flows upon the earth.'⁸⁰

In a word, they are Thracians bounded by the Hellespont, Paenonians from the Axios, and Kikones between them. No Thracian tribes are specified and no town named in the catalogue, but Peiroos, one of their leaders, comes from Ainos, the harbour at the mouth of the Hebrus and the obvious port for that valley,⁸¹ exactly the Maritza on which we found there were plentiful remains.

Next to them came the Kikones with no specific boundaries mentioned, but other evidence connects them with Mount Ismarus, which separated them from the Hebrus valley. It is not easy to say where was the ancient port: it was probably at Dede Agatch.⁸²

The Paenonians, as Professor Macurdy⁸³ has shown, originally occupied far more extensive territory than they did later when the Macedonians drove them back to the upper Axios. They doubtless extended from the Nestos to the Axios, including on the way the Strymon and the Pangaeus range. That they were people of great wealth and importance is clearly manifest for they had the gold and silver mines of Pangaeus and rich fertile country for corn-growing. Probably a large part of what was later Macedonia was formerly inhabited by the Paenonians, whether they belonged to the Thracian or Illyrian stock. These I think, anyway, were branches of the same people from the Danube district. The Thracians are specially mentioned for their metal work, goblets, and great swords, and also for their white horses, which were famous from the time of Rhesus throughout classical antiquity.

If we include in Paenonian territory the mouths of the Axios and Strymon, we should undoubtedly connect them by a road via Iako Bolbe cross the top of Chalcidice. From Troy the sea route to Salonica would have been both long and dangerous, as Xerxes learned to his cost. From the mouth of the Strymon the route to Troy might be overland via the coast towns already mentioned, or across the sea by a straight south-east course, or by the stepping-stones of Thasos, Samothrace, Imbros and Lemnos. This connexion seems more than likely in view of Professor Macurdy's researches, which are based chiefly on names and religion.

The Dardanians gave their name to the Dardanelles and seem to have followed the route to Troy via Samothrace, the island which Pausanias says had originally been called Dardania.⁸⁴ Dardania-Paenonia was from early times an important commercial centre, right on the trade-route from the Danube, and much metal must have passed that way. In historic times the

⁸⁰ *Ibid.* ii. 843-877.

⁸¹ *Leaf, Troy*, pp. 271, 272.

⁸² *Ibid.* p. 272.

⁸³ Macurdy, in *Transactions Am. Phil. Ass.*, xlvi. 1913, pp. 119-129.

⁸⁴ *Ibid.* p. 192.

coinage of that region was remarkably rich, as the researches of M. Svoronos have shown.²⁴

Hardly enough excavation has taken place to prove much about remains, but there must have been some contact as the references to Lemnos and Imbros in the *Iliad* show. Moreover, Lemnos kept up relations with both Trojans and Greeks: Dr. Leaf describes the Lemnian attitude to the Greeks as one of 'friendly neutrality': it was a base of supplies and a market for slaves, but also maintained commercial relations with the Trojans, acting as brokers for the ransom of important prisoners.²⁵ Maybe its position was like that of the present Switzerland, which has had to keep on friendly terms with both sides in the war.

These converging lines indicate that Troy was a meeting place for people from both sides of the Aegean, and that the whole Hellespontine district must be regarded as a geographical unit. One is tempted to conclude that at one time all roads led to Troy whether they were land routes or over the wet sea ways. Dr. Leaf's view, now familiar to all scholars, is that Troy's wealth was due to her control of the Dardanelles and that with the fall of Troy and the opening of the Straits to the Greeks her glory departed. This would give a reasonable explanation of why she never rose again to any importance after the destruction of the Homeric city. The fact that the book *Troy, a Study in Homeric Geography*, was published in 1912 will show that this suggestion was based on independent evidence and in no wise influenced by recent events, which have demonstrated so clearly the infinite importance of the control of the Dardanelles.

And it was not only the Dardanelles which contributed to Troy's dominant position. Salonica, that other strategic point of such value to the Allies—at first during a long period of apparent inactivity and then as a base for a great movement northward which reached to the Danube and beyond—Salonica seems also to have had close connexions with Troy.

We find that Troy was but slightly influenced by the Aegean civilization, and if we believe that the Greeks of history represent the fusion of northern or Achaean conquerors with their Mycenaean subjects, and that the northern element was Greek or Hellenic *par excellence*, then we may not only accept Professor Bury's suggestion that the Trojans were Greeks,²⁶ but also, paraphrasing *Hibernis ipsis Hiberniores*, we may say that they were more Greek than the Greeks themselves.

This would be of course but an absurd half-truth, for to Troy as to Hellas many elements contributed. We do not know what was the original stock at Troy, but we know that the Danubian element came early and came often, that there was connexion with Cyprus and with the Anatolian districts, but that the Aegean influence was temporary and apparently rather superficial, and that after it had passed the old European kinsmen once more poured into the city of their ancestors.

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²⁴ *Ibid.* p. 125.

²⁵ Leaf, *Troy*, p. 208.

²⁶ Bury, *Quarterly Review*, July, 1916.

TWO NOTES ON HELLENIC ASIA.

I.—THE ARAMAIC PARCHMENT FROM AVROMAN.

IN the *Journal of Hellenic Studies*, xxxv. 1 (1915), Mr. Ellis Minns has given an interesting account of three documents found at Avroman, west of Hamadan, and has deciphered two of them which are in Greek. The third is written in an Aramaic alphabet which has hitherto remained undeciphered. Mr. Minns was good enough to send me a photograph of it, but I postponed an examination of this until I could have an opportunity of seeing a second text, also in Aramaic letters, but attached to one of the Greek documents and therefore presumably relating to the same transaction. When a photograph of this second text arrived, however, it was not distinct enough to be of any use; the ink of the original had been too much rubbed to allow the forms of the letters to be fixed with certainty.

Owing to the war and my absence from Great Britain I had to put aside all further thought of the Avroman documents, and it is only since my return to this country that I have been able to look at the photographs of them again. The Aramaic is extremely cursive, various letters being written alike; hence the difficulty of its decipherment. But I can now give a translation of the text, which is not in a 'Pahlavi dialect,' as has been suggested, but in an Aramaic dialect which, as might be expected from its geographical position, has been affected by Assyro-Babylonian influence. It is only the proper names which still offer difficulties, and I must leave the final determination of these to other scholars.

The text in Hebrew transcription:—

1. שנת (13) ורהא ארבתת בבפנו ה(ס)סחר ברי סובין
2. זי מן נוכו כרמא אתמר מם אבוכשן הלך ועת
3. חבנו אויל ברי גשנין ברי אהו בלא זבון כסף
4. מאמן זימחסני א . . . ה . . . חמי אכלו הרמסבו
5. ישהדין (מוחד) ברי א(ס)ין . . . ברי (כ)שני ארשת
6. ברי א . נ . דה(ו)ת(נמי) ברי מסדהרי סונך ברי מא(ס)ה(ר)
7. כרמא אתמרת כרמא זבנת אויל מן
8. ה(ס)סחר בלא זבון כסף

1. - Year 321 (?), month Arbateth, in Kophnu Hassahar (?) son of Sabin,
 2. who is from Ganzaku, has sold the vineyard, water, fruit and stocks, access and egress,
 3. and Awil son of Gashnu son of his brother has bought it. He has bought the whole for 5 pieces of silver.
 4. Whoever [disputes] my possession, bitter (be) his food, accursed his drink!
 5. Witnesses: Machad (?) son of Asin (?), son of Kashnu (?), Arshateh
 6. son of A . . . , Dad . . . , mi son of Masdahari, Sunak son of Maskhu (?).
 7. [I Has(s)ahar] have sold the vineyard. I Awil have bought the vineyard from
 8. Has(?)-sahr. The full purchase-money is 5 pieces of silver."
- Letters between brackets are doubtful.

Notes.

1. The date is doubtful, though the ciphers read as I have given them. But I do not know of a parallel to the mode in which the hundreds are represented, and in כסף (l. 3) *samech* has the same form as the cipher 20. But כן, which would then be the reading, would yield no sense.

Warkha, 'month,' for ירחא indicates Assyrian influence.

Arbateth must be the Baktrian Kharbatat, Neo-Persian Khordat. In the list of Cappadocian months the name is written *'Αραιότατα*; Epiphanius (*De Hær.* ii. 24) gives it as *'Απαράτ*, and states that the 13th of it corresponded with the 6th of January.

I read *Kophnu*, since in the Greek documents the name of the village appears as *Kôphanis* and *Kôpanis*.

The name of the seller is unfortunately not quite certain. The second element in it, however, seems to be S-H-R, which would represent S-TH-R, as *Μεθρ* represents *Mithra(s)* in the Greek documents. The first element would correspond with that in *Hais-tanes*, written *Os-thanes* by Pliny (compare the *Ὀσθάνης* of Hdt. vii. 77). Perhaps the whole name is that written *Oxathres* by Diodorus, though the second element is rather that found in *Megasidras*; if this is the Old Persian *Bagachitra* (*hitra*, 'offspring,' becomes *chehr* in later Persian, as *Mithra* becomes *Mihr*). I am uncertain whether ברר or בור should be read. In the majority of cases the final letter is written like ך rather than ך. On the other hand, בור instead of בר would be explicable as an Assyrianism, modelled after the Assyrian *mar-ru* (sa), 'son (of),' literally "his son (of)." Sabin is the Σαβήνης of the Greek documents.

2. O-Z-K-U is evidently the Ganzakê of the Greek documents.

אתמר is the Ethpael of the verb, which appears in Hebrew as מור and מחר, the Hiphil of which means 'to sell,' as in Mic. ii. 4. I am uncertain whether the word is to be regarded as a 3rd pers. s. of the perfect or as a 1st pers. s. of the imperfect, as מחסני in l. 4 might imply.

מס is the Assyrian *nammi*. We should have expected מין or מיא.

The Aramaic אב in the sense of 'fruit' is found in Dan. iv. 9.

The Greek documents show that כשרן, the Syriac *kāshōr*, must signify 'vine-stocks' in this passage. The Greek, as translated by Mr. Minns, is: 'water and vine-stocks, both those in bearing and those not, and ingress and egress.'

3. נבן is the usual Aramaic verb for 'buying' a piece of property. In Palmyrene נבון is 'he bought.'

Awil is the Assyrian *Awilu*, 'the man.'

4. מאנן is again an Assyrianism.

מחנן is from חבן, 'to possess'; *cp.* Dan. vii. 18. The word which follows is partly obliterated.

סכר is for סכור.

5. The reading of the first name is wholly uncertain. The first letter may be *m*, *l*, or *h*; the second *b*, *g*, or *n*; and the third and fourth *d*, *r*, or *n*. The second letter of *Asin* (*T*) may be *kh*. The next name is obliterated. The first letter of *Kashim* may be *r* or possibly *h*; the last letter is perhaps *q*.

With *Arshateth* compare *Ἀρσασθάρης* and *Ἀρθάρης* in the Greek documents.

6. I cannot suggest any reading for the first name in this line, and the next name is partly obliterated.

With the spelling of *Mada-hari* *cp.* the Greek *Ἀπαμάδης*.

Has s-y-x-k anything to do with the Greek *Σάκκ, Σανάκκ*?

Since the above was sent to the printer Dr. Cowley has published an article on the Avroman text in the *Journal of the Royal Asiatic Society* (April, 1919). We agree in the reading and rendering of the 'key-words,' but he is undoubtedly right in making the name of the month *Arotat* instead of *Arbateth*. He makes *Thrik* the name of the first witness.

II.—NOTE ON MR. ARKWRIGHT'S ARTICLE UPON 'LYCIAN AND PHRYGIAN NAMES.'

In his article on 'Lycian and Phrygian Names' (*Journal of Hellenic Studies*, xxxviii. p. 70) Mr. Arkwright questions the value *h* which I assigned to the Karian letter † or ‡ in my decipherment of the Karian alphabet and inscriptions (*Trans. of Soc. of Biblical Archaeology*, ix. 1; 1887). A reference to my Paper will show that I did so with considerable hesitation, but the value has since been accepted without question by all the scholars who have interested themselves in the Karian inscriptions, and has now been given as a matter of course to the same character in the newly-discovered Lydian texts.

These Lydian texts, however, have raised some doubts in my mind. It does not appear to have been noticed that the word for 'king' in them, which is to be read *h-a-l-m-l* (Mr. Arkwright being obviously right in the value he suggests for the third and fifth letters), is the *παδμυς* of Hippoanax (9), which we are told was the Lydian word for 'king'. It seems to be

allied to the Phrygian *βαλῆν* and Trojan *πέπραμος* or *πρίαμος*, which had the same signification. It looks, therefore, as if ϕ in Lydian had a value which to the ears of the Greeks resembled *p*, a sound which otherwise does not seem to be represented in the Lydian alphabet. On the other hand, if the letter in question does not correspond with *h*, the aspirate which we know from proper names to have existed in the Lydian language would not have a representative.

A. H. SAYCE

THE VENUS DE MILO AND THE APOLLO OF CYRENE

AT the recent temporary rearrangement of the sculpture galleries of the British Museum a cast of the Aphrodite was accidentally placed by the side of the large Apollo discovered at Cyrene by the British excavating party. This Apollo has, it appears to me, suffered from an inadequate appreciation of later Greek art, especially of the Eastern schools, and it has been a victim to our poverty in descriptive terms. By this poverty Greek sculptures which are later than what has been supposed a 'good period' are all swept up together as 'Roman.' Roman Art at the simplest is quite the most difficult to determine because so little of it was truly and characteristically Roman. The term is used as of local significance, then in an imperial sense and again of an undefined span of time.

The following rough grouping of late classical sculptures may be suggested tentatively, but the whole question of an extended and precise nomenclature needs to be considered and would be a fit subject for a conference of archaeologists.

(1) Original works wrought in Greece and Hellenised lands, which necessarily continued older traditions and often showed admiration and study of the great masters (*Later Greek and Hellenistic*).

(2) Semi-original work which intentionally simulated the style of some former school (*Archaising, Archaistic and New Attic*).

(3) Copies of antique sculpture more or less accurate and competent (*Antique Copies*).

(4) Original Sculpture wrought in Rome and lands artistically dependent on Rome answering to a Latin tradition (*Roman*).

(5) Work supplying a Roman demand, by Greek artists following Greek traditions (*Greco-Roman*).

Our Apollo of Cyrene belongs to Class I. It was no reproduction for a collector but it was a traditional work wrought for a definite place and for a ritual purpose. It is the cult statue of an important temple in a rich and artistic city; it is of semi-colossal scale, choice material and most competent workmanship; it must be one of the most perfect temple statues known and is a finely preserved example of the sculptor's art: the polished radiance of the face reflects a light on marble sculptures generally, and yet this fine statue is hardly mentioned in the books and

is badly crowded by inferior works in the Museum. It should be isolated, set in a *vista* and made known as an authentic cult statue which once occupied the chief place in the temple which sheltered it.

It belongs to a well-known group but it is a variant of an unexhausted type; an original Hellenistic work of 'sacred' character, it may have had more than a local reputation. The type was still famous at the beginning of our era and such an Apollo was represented in a painting of the twelve gods at Pompeii illustrated by Gell. The juxtaposition of the cast of the Aphrodite and the marble Apollo brought out quite remarkable resemblances in their general structure and treatment, so much so that I could readily believe that both might have been the work of one master. Several points of evidence which I must pass over might be brought forward to show that this Apollo is a work of the second century B.C.

Three suggestions may be gathered from the Apollo to apply to the restoration of the Aphrodite. Her left foot was certainly raised a few inches above the ground and rested on an object or step¹; her right hand did not necessarily support slipping drapery; indeed the raised left foot throwing the thigh out at an angle, the 'straddling' pose and inward swing of the left leg would just serve to support drapery thus wrapped around the hips. By her left side was some accessory taking the place of the tree-stump and serpent of Apollo. In Furtwängler's excellent account of the Aphrodite he shows that a subsidiary figure² was found with the statue but he summed up against its authenticity and, in his restoration, substituted a plain pillar. Now in the Fitzwilliam Museum, Cambridge, I have just seen a fragment of a Venus (about half scale) which obviously repeated the characteristics of the Venus de Milo and must have been a very inferior copy of it. It is described as: 'Fragment of Aphrodite found in the Troad—Clark No. 2' (Note the place of finding). The upper part of the figure is missing but fortunately it was broken across the nude body at some distance above the drapery, which is complete. The left foot is whole and was raised above the ground level. By the left side of the goddess, a statuette on a pedestal was represented. This companion figure was draped to below the knees but the manner of draping suggests a male figure (a Hermes?). Its proportions show that when complete it must have risen above the waist of the greater figure of the goddess to a height which would have been suitable to support her left arm when partially extended. I may mention also that at the Victoria and Albert Museum there is or was a little terra cotta figurine of Aphrodite who leaned against Eros standing at her left side. Again the Cnidian had a support for her left arm.³

We may now confidently conclude that the Venus de Milo leaned her left arm on a pillar or a subsidiary figure representing a statuette; for

¹ Compare the Venus of Capua which is practically a copy of the Venus de Milo; also the Victory of the Trajan column.

² Two forms were discovered but a socket

in the plinth of the statue shows that only one figure or object was associated with it.

³ See Reinach's *Repertoire* for other figures.

myself I think the evidence is in favour of the latter. As Furtwaengler points out, the carving of the left side of the statue suggests that an object prevented its being fully seen and a pillar would hardly have been sufficient reason for any modification of workmanship. The same attitude, leaning



FIG. 1.—SKETCH FROM A
DRAWING OF A PAINTING
AT POMPEII.

for support to the left with the left foot raised on a step, is found on a little ivory relief of Hygieia (c. 380 A.D.) in the Liverpool Museum (Venturi, *Storia* vol. i. p. 391). Here however the support is a tripod with a coiling snake. This support for the arm rises high and the hand droops. The source of this design may have been an Apollo of the Cyrene type, but there is in it, I feel, some memory of the Aphrodite. As to the action of the lost right hand of the Aphrodite, the Cambridge fragment shows that the drapery was not held. As this little work was all in one piece, traces of the hand could not be lost, as might possibly be the case with the great original, if the lower arm of that had been in a separate piece.

There is in the Print Room of the Victoria and Albert Museum a drawing by Mr. S. Vacher of a faded painting at Pompeii of a Venus which to some degree seems to echo the statue although it is more nude (Fig. 1). This painted Venus held a mirror in her left hand and with her right adjusted a wreath; and I am drawn to think that the Venus de Milo followed the toilet motive of the Cnidian. It has hardly been brought out that the latter, occupying an open kiosk in an enclosed garden or 'grove,' would almost certainly have stood close to a fountain basin in which it was reflected—a Bath of Venus. Polished, coloured, gilt* and set around with flowering shrubs it was far more than what we call a statue; it was an apparition. The Aphrodite of the 'Gardens' at Athens again must have represented the goddess in a sylvan sanctuary.

W. R. LETHBRIDGE.

* The hair of this Venus de Médici was gilt.

THE PROGRESS OF GREEK EPIGRAPHY, 1915-1918.

IN my last epigraphical summary (*J.H.S.* xxxv, 260 ff.) I dealt with the period from July 1914 to June 1915 inclusive. The present article continues the record down to the close of 1918. The conditions of the three and a half years which it thus attempts to cover will, I hope, prove a sufficient excuse for any omissions which may exist—as I fear they must—in the following pages. That the output of these years should have been so much smaller than that of normal times will cause no surprise: what is surprising is rather the fact that so many books and articles should have appeared, including not a few of great and permanent value, during a world-crisis which has demanded the thought and activities of many, and the lives of some, who would otherwise have been engaged in epigraphical work—a fact which affords striking testimony to the vitality of the studies with which this article deals. Actual excavation has naturally been brought almost completely to a standstill, and the number of inscriptions published for the first time is consequently small, but noteworthy progress has been made in the restoration and interpretation of numerous previously known, and in some cases very familiar, documents.

General.—The war has inevitably retarded the progress of the great collections of inscriptions, especially of those volumes which depend upon international co-operation. Nevertheless, the fascicule of the *Inscriptiones Graecae* devoted to Euboea appeared in 1915, and two further instalments of the second edition of *I.G.* ii. and iii. have also been published; these will be noted below in their proper places. Collitz and Hoffmann's invaluable *Sammlung der griechischen Dialektinschriften* has at length been completed, thirty-two years after the appearance of the first part; the concluding section,¹ edited by E. Fraenkel and K. H. Meyer, contains *addenda*, grammar, and index to the dialect-inscriptions of Crete and to those of Sicily. A useful collection on a much smaller scale is G. Nicole's *Corpus des céramistes grecs*, which contains a complete list of the extant signatures of the 131 potters and painters whose names have survived on their vases.²

Two selections of epigraphical texts claim notice. An event of first-rate importance is the publication of a third edition of Dittenberger's *Sylloge Inscriptionum Graecarum*, which ever since its first appearance in 1888 has

¹ IV Band, 4 Heft, 3 Abt. Göttingen (Van denhoek u. Ruprecht): O. M. 89.

² Paris (Leroux), 1917. Reprinted from *Rev. Arch.* iv. (1918), 273 ff.

hold unchallenged the first place among books of its kind and has deservedly ranked as a masterpiece of insight and erudition. The new edition,² in the preparation of which F. Hiller von Gaertringen has had the assistance of J. Kirchner, E. Ziebarth, and H. Pomtow, contains a portrait and memoir of the author, who died in 1906, and the two volumes already issued comprise the historical inscriptions arranged in chronological sequence; the third volume is to contain the sections dealing with *res publicae*, *res sacrae* and *vita privata*, the fourth will be devoted to indices. The immense growth of the historical section (910 inscriptions, as compared with 424 in the second edition) is due in part to the discoveries of recent years, in part to the insertion in this category of texts which previously appeared in other sections of the book, in part to the admission of a somewhat disproportionate number of Delphian documents. The modifications introduced, notably the titles prefixed in thick type to the several inscriptions, make it much easier to consult the work, which has already taken its place as the standard selection of Greek inscriptions. R. Halbing's *Auswahl aus griechischen Inschriften*³ is inaccessible to me, but from reviews by W. Bannier⁴ and W. Larfeld⁵ I learn that it contains a short account of the letter-forms, language, dating and value of Greek inscriptions, together with thirty-seven duly classified texts accompanied by German translations and brief commentaries.

In 1916 the British Museum successfully completed the publication of its magnificent collection of Greek inscriptions, of which the first volume appeared in 1874. The concluding section,⁶ edited by P. H. Marshall, forms the second portion of Part IV and contains 'Supplementary and Miscellaneous Inscriptions' and a re-issue of the celebrated inscription of Caius Vibius Salutaris (No. 481), together with indices and comparative tables to the whole collection. It comprises 232 texts, most of them excellently illustrated by photographs or facsimiles, carefully revised and accompanied by an adequate commentary. Some of the texts—e.g. the Rosetta Stone, the Sigeum Stele, and the two bronze tablets from Oeanthea—are among the best known of all Greek inscriptions, but 48 of them are apparently unpublished previously, including a long but unhappily fragmentary decree of a *βίαιος* at Teos (1032), a decree of Xanthos dated 257/6 B.C. (1042), and the latter part of a decree of Attalia, probably of the first century B.C. (1044). The Trustees of the Museum are also to be congratulated on the issue of an excellent *Guide to the Select Greek and Latin Inscriptions exhibited in the Department of Greek and Roman Antiquities* by A. H. Smith at the astonishingly low price of sixpence. It contains a short introduction on the early Greek alphabets and some account, usually accompanied by a facsimile or by a complete or partial transcription, of 101 texts (82 Greek, 18 Latin, and 1 bilingual) exhibited in the Hall of Inscriptions or elsewhere.

² Leipzig (Hirzel), Vol. I, 1913: 30 M. Vol. II, 1917: 25 M. Reviewed *J.H.S.* xxxii, 127 f.; *Berl. phil. Week.* cxcv, 221 ff.; 1918 ff., xxxii, 1021 ff.

³ Berlin u. Leipzig (Goschen), 1915: 90 Pf.

⁴ *Berl. phil. Week.* xcvi, 321 ff.

⁵ *Week. kluss. Phil.* 1915, 1062 ff.

⁶ *Selected Greek Inscriptions in the British Museum*, IV, sect. 2, 1916. Reviewed (*Mon. Rev.* xxxi, 141 f.; *J. A. R. M.* 1916).

A. H. Smith's valuable paper⁷ on reliefs recently acquired by the British Museum is only incidentally epigraphical, and the inscriptions on the reliefs discussed have appeared in Marshall's work already mentioned. The only other Museum publication to be noted is E. M. Prück's catalogue of stamped amphora handles and tiles in the Hermitage Collection at Petrograd, known to me only through a review by F. Hiller von Gaertringen.⁸ A fourth series¹⁰ of A. Wilhelm's valuable *Neue Beiträge zur griechischen Inschriftenkunde* calls only for passing mention here, as the discussions it contains will be referred to below under their appropriate geographical headings.

No general works on Greek epigraphy have appeared during the war, but A. Rehur's review¹¹ of the third edition of Larfeld's *Griechische Epigraphik* is noteworthy as calling attention to a number of weaknesses in this standard work. C. M. Kaufmann's book¹² on Christian epigraphy is still inaccessible to me, but the name of its author is a sufficient guarantee of its value.

Several important articles have appeared bearing directly or indirectly upon the vexed question of the origin of the Greek alphabet. J. Sandwall devotes an interesting paper¹³ to the Cretan linear script, giving complete catalogues of all the signs used in the two systems A and B, the latter of which he regards as 'a Cnossian remodelling of the general A-type,' due probably to dynastic influence. The author is convinced that the Cretan linear script was syllabic in character, and believes that the finds recently made at Tiryns are in this script, probably of class A. He appends a list of 62 men's and 41 women's names, and holds that there are indications of their non-Greek character. A. H. Gardiner has published¹⁴ a series of eleven texts from the Sinaitic papyrus in a writing which apparently stands midway between the Egyptian hieroglyphs and the Phoenician letters, and affords a valuable argument in favour of the Egyptian origin of the Semitic alphabet. K. Sethe, who in 1910, before learning of this new evidence, maintained in a lengthy article¹⁵ the Egyptian derivation of the Phoenician writing, has wholeheartedly acclaimed¹⁶ Gardiner's discovery. 'We must,' he says, 'be dealing here with an intermediate stage between the Egyptian script and the later Phoenician or Semitic alphabet. The missing link for the derivation of the Phoenician alphabet from the Egyptian script has here been found. This derivation itself, the inner necessity of which could hitherto be established only theoretically, is thus practically proved to be a fact' (p. 449).

Assuming as proved the Phoenician parentage of the Greek alphabet E. Hermann has attempted¹⁷ by a novel method to discover the branch

⁷ *J.H.S.* xxxv, 65 ff.

⁸ *Berl. phil. Week.* xxviii, 1029 ff.

⁹ *Stich.* Wien, cxcix, 6.

¹⁰ *Berl. phil. Week.* xxxvi, 236 ff.

¹¹ *Handbuch der antiken Epigraphik*, Freiburg i. B. (Heidel.) 18 M.

¹² *Jahrb.* xxx, 41 ff.

¹³ *J. Eg. Arch.* ii, 1 ff.

¹⁴ *Götting. Nachr. Gesellschafts Mitteil.* ungen, 1910, 88 ff.

¹⁵ *Götting. Nachr. Phil.-hist. Klasse*, 1917, 457 ff.

¹⁶ *Ib.* 476 ff.

of the Greek race in which the Phoenician script was transformed into the Greek *Uralphabet*. In fourth-century Athens π and β were named $\pi\epsilon\tau$ and $\beta\eta\tau\alpha$ respectively, and as these names are probably original we must look for a section of the Greeks which always made a distinction between the two vowel sounds represented by π (ϵ) and η (α). This rules out the Dorians and establishes a *prima facie* case for the Ionic-Attic Greeks, though it does not absolutely dismiss the claim of one of the various Achaean-speaking groups. Hermann's article is subjected to a trenchant criticism¹⁸ by A. Mentz, who points out the weakness alike of its assumptions and of its method and, while admitting the interest of the letter-names for the history of the alphabet, denies that these prove anything about 'the language of the Greek *Uralphabet*.'

Several miscellaneous articles still call for notice. F. Hiller von Gaertringen gives an account¹⁹ of the recent progress made in the publication of the *I.G.* and other great collections with indications of what may be awaited in the near future. R. Henze's essay²⁰ on the metrical epitaphs of fallen warriors draws mainly upon literary material though epigraphical examples also are cited: the same is true of J. Geffcken's studies in the Greek epigram²¹ and of the same scholar's selection of epigrams.²² A. Mentz has shown²³ that Reinhold Labenau of Königsberg, the narrative of whose travels (1573-89), embellished by numerous copies of inscriptions, has recently been published,²⁴ does not include in his collection any new material of value: not only is his work inexact and indiscriminating, but there are proofs that he derived solely from literary sources some of the texts which he claims to have seen with his own eyes. K. Scherling examines²⁵ the inscription ΜΝΗΣΩΗ, which occurs, alone or in conjunction with a personal name, on nine gems of the Imperial period, a gold ring from Syria and a *graffito* from the temple at Baulbec, and concludes that the word is a curious form of the 2nd person singular aorist conjunctive, passive in formation but middle in inflexion. The ancient *abacus* has been exhaustively treated²⁶ by A. Nagl, who describes and discusses extant Egyptian, Greek and Roman examples: although no attempt is made to examine in detail the Greek numeral notation as such, there is much in this essay which is useful for the study of the acrophonic system, and a special chapter is devoted to the historical relation of the Greek alphabetic notation to the *abacus*. In a suggestive paper²⁷ on the terms $\epsilon\lambda\phi\eta\eta$, $\sigma\tau\omicron\upsilon\delta\alpha\iota$, $\delta\sigma\tau\omicron\upsilon\delta\epsilon\iota$, etc., B. Keil traces historically the meaning and use of these words in inscriptions and in literature, and incidentally discusses a number of epigraphical texts, a list of which is included in the

¹⁸ *Beit. phil. Week* xxviii 1173 ff.

¹⁹ *Klio*, xv. 184 ff.

²⁰ *Neue Jahrb. Kl. Alt.* xxxv. 1 ff.

²¹ *Id.* xxix. 88 ff.

²² *Griechische Epigramme*, Heidelberg.

(Winter), 5 M. 60.

²³ *Arch. Anz.* xxi. 49 ff.

²⁴ *Mittheilungen aus der Stadtbibliothek zu Königsberg i. Pr.* iv ff.

²⁵ *Hermes*, liii. 88 ff.

²⁶ *Die Rechenzahl der Alten*, Sitzb. Wien, cxxxvii. 5.

²⁷ *Leipziger Berichte*, lxviii. 4.

index appended to the essay. In an article²⁸ which lies on the borderline between epigraphy and numismatics the same scholar examines the epigraphical indications of the currency and value of the *velobriatus* in Greece and Asia Minor: he explains the phrase *τόκος ποταμικαίος* in an inscription²⁹ of Magnesia sub Sipylus = 6% and restores the word *ποταμικόν* in a manumission record of Larissa (*I.G.* ix. 2. 549) in place of the enigmatic -ΠΙΤΑΙΚΟΝ. In reply to O. Montelius, who dates the foundation of Capua back to the eleventh century and the use of alphabetic writing in Etruria and Latium to the ninth century, V. Gardthausen has advanced arguments³⁰ to prove that the Italic stocks learned their scripts from a Greek and not from a Phoenician source and that both the introduction of the alphabet and the foundation of Capua must have taken place about 750 B.C. K. K. Smith has collected³¹ the quotations from Greek literature (Homer, Euripides, Lucian, Sositades, etc.) which occur in recently discovered inscriptions.

Attica.—Remarkable progress has been made with the interpretation and historical utilization of Attic inscriptions, and the number of new discoveries, though naturally falling short of the normal level of pre-war years, is by no means inconsiderable. Of *Inscriptiones Graecae II et III editio minor* (usually denoted by *I.G.* ii.²) a further fascicule³² appeared in 1916 containing the decrees later than 229/8 B.C. and the *leges sacrae* while another³³ has, I understand,³⁴ been subsequently issued, comprising chronological tables and indices to the instalments already published. P. Grandor has contributed a notable series of articles based wholly or partly upon the evidence of inscriptions containing, in addition to numerous corrections of published texts, thirty-four documents previously unknown. One of these articles³⁵ contains a discussion, primarily chronological, of the lists of *πρυτανεῖς* and the monumental staircase of the Acropolis, the pylons and the Benê Gate, a second³⁶ is devoted to the study, artistic and historical, of the *coenotae* of the Athens Museum; in a third³⁷ 37 inscriptions of the imperial period are published, either for the first time or with improved readings and restorations, including groups of texts relating to Herodes Atticus and his family, to Hadrian and to a number of Attic archons of the second and third centuries of our era; the fourth³⁸ includes sixteen new inscriptions, amongst which are a list of archons (No. 7), a base with the name of Claudia Athenais, daughter of Herodes Atticus (12), and an eighteenth example of the execrations of Herodes (13). The remaining Attic inscriptions now first published include the prescript of a decree of 320/19 B.C. moved by the orator Demades,³⁹ a fragment of

²⁸ *Zeits. Num.* xxvii. 47 ff.

²⁹ *Kor.-Promerstein, Bericht über eine Reise in Lydien*, No. 5.

³⁰ *Neus Jahrb. Kl. Alt.* xxxvii. 309 ff.

³¹ *Classical Weekly*, 13th Nov. 1915, p. 41 ff., known to me only through *Am. Journ. Arch.* xx. 227 f.

³² *Pars i, fasc. 2*, Berlin (Reimer): 49 M.

³³ *Pars iv, fasc. 1*, Berlin (Reimer): 12 M.

³⁴ *Sich. Berh.*, 1916, 32.

³⁵ *B.G.H.* xxxviii. 272 ff.

³⁶ *Ib.* xxxix. 241 ff.

³⁷ *Ib.* xxxviii. 331 ff.

³⁸ *Rev. Arch.* xl. (1917), 1 ff.

³⁹ *Λογ. Δελφ.* i. 193 ff.

an Attic alliance,⁴⁰ perhaps that concluded with Perdikkas' brother Philip in 433/2 B.C., two further boundary-inscriptions of the Ceramiciens⁴¹ belonging to the fourth century B.C., a decree of the *θιασώται* of Bendis at Salamis⁴² dated (according to its editor, following von Schoeffer's list of the Athenian archons) in 276/5 and rendering possible a more satisfactory restoration of a very similar decree of a somewhat later date,⁴³ two fresh fragments⁴⁴ of a document (*I.G.* ii. 959) containing lists of naval crews and showing the precise composition of a trireme's crew (except as regards the numbers of *παύροι* and *δραχμόντες*) and the distribution of citizens, metics, foreigners and slaves, and nine fragments (four of them previously published, but not brought into conjunction) of a decree granting to Julia Donna, probably between 196 and 198 A.D., the honour of three yearly festivals for the aid she had given to an Athenian embassy at Rome.⁴⁵ To these must be added a dedication to Apollo Patroös,⁴⁶ a number of epitaphs ranging from the sixth century B.C. to the Christian period⁴⁷ and twelve votive inscriptions on bronze objects now in the Acropolis Museum.⁴⁸ Of the epigraphical results of the excavation of Pericles' Odeum⁴⁹ only one is of interest, a bone theatre-ticket of the Imperial period bearing the legend XIII ΑΙΚΥΛΑΟΥ ΗΓ, doubtless with reference to the revival of some work of the great dramatist. In his *Attische Urkunden II*,⁵⁰ A. Wilhelm publishes new fragments of (a) a document prescribing the oath of the Attic *δικασταί* appointed in 164/3 B.C. to settle disputes between Ambracia and Acarnania, (b) a treaty of 111/0 B.C. between Lyttus and Olus in Crete, and (c) the decree of the Dionysiac *τελεῖται* in honour of Arlibazus of Perraeus; he also restores a fragmentary decree for a Theban flute-player and examines the restrictions placed upon the *ἐξαιρέσις* granted by a number of Attic decrees, some of which he restores or corrects. The study of Attic inscriptions, especially those of the classical period, owes much to the indefatigable labour of W. Bannier, who has devoted special articles to the two famous documents (*I.G.* i. Suppl. 27b and ii. 140) regulating the Kleinsian *ἀναρχία*,⁵¹ to the building-record of the Propylaea,⁵² to the accounts of fifth-century buildings and statues⁵³ and to certain fourth-century traditions.⁵⁴ In a series of seven articles⁵⁵ under the title 'Zu attischen Inschriften' the same scholar has thrown light upon a number of Attic texts (too numerous to be specified here in detail) including

⁴⁰ *Klio*, xi. 103 ff.

⁴¹ *Arch. Anz.* xix. 100 ff.

⁴² *ApX.* 'Ep. 1915, 1 ff.

⁴³ *I.G.* ii. 920; cf. *Jahreshefte*, i. 120 f.

⁴⁴ *Arch. Anz.* xix. 124 ff.

⁴⁵ *Jahreshefte*, xvi. 249 ff.

⁴⁶ *ApX.* *Δελτ.* ii. 143.

⁴⁷ *Ib.* 138 ff. *ναυαρχία*, 80 ff. *ApX.* 'Ep. 1916, 1 ff. *Bull. Mus. Arc.* xi. 124, *Museum Journal*, viii. 10 ff.

⁴⁸ *ApX.* *Δελτ.* i. *ναυαρχία* 33 f. The inscriptions in *ApX.* 'Ep. 1916, 9 ff. are

forgeries.

⁴⁹ *ApX.* 'Ep. 1915, 143 ff. *Episcopi*, 1914, 81 ff.

⁵⁰ *Sitzb. Wien.* clxxx. 2.

⁵¹ *Bull. phil. Week.* xxxv. 1230 ff.

⁵² *Ib.* xxxviii. 806 ff.

⁵³ *Ib.* xixv. 342 ff.; xxxvi. 158 ff.

⁵⁴ *Rh. Mus.* lxx. 584 ff.; cf. 408 ff.

⁵⁵ *Bull. phil. Week.* xxxv. 1612 ff.; xxxvi. 1067 ff.; xxxvii. 91 ff., 344 ff., 1216 ff., 1342 ff.; xxxviii. 449 ff.

the Tribute Quota-lists, the Parthenon-record, the accounts of the *πωληται*, the Phaselite decree and other equally well-known inscriptions, while Attic documents are also prominent among those which are discussed in the first⁵⁵ of his two articles entitled 'Zu griechischen Inschriften.' F. von Hiller has suggested a new and attractive restoration⁵⁷ of the 'Salaminian Decree,' which is accepted by F. Groh⁵⁶ with one modification which von Hiller himself approves. No fewer than four articles deal with the 'Chalcidian Decree.' W. Kolbe's view,⁵⁸ that the *ξένοι ἄσοι μὴ τελοῦσαι Ἀθήνας* are Athenian *μέτοικοι* who have received *ισότηλεια*, is sharply criticised by E. von Stern,⁵⁹ who interprets the passage to mean that Chalcidian metics are to pay taxes to Chalcis except those paying taxes to Athens and foreigners to whom Athens has granted *ἀντέλεια*. C. F. Lehmann-Haupt, who reviews⁶⁰ the main problems raised by the decree, has modified in the light of Kolbe's suggestion his own previous view and maintains that the *ξένοι* are Athenian metics who received *ισότηλεια* or *ἀντέλεια* as settlers on the confiscated lands of the Chalcidian *ἱπποδῶται*,—a solution which J. H. Lipsius⁶¹ rejects in favour of that of Meyer and von Stern. Other well-known inscriptions which have received fresh attention from experts include the 'Saunan Decrees' of 405/3 B.C.,⁶² the Eleusinian tax decree, which is attributed by R. H. Tanner⁶³ to 443 B.C., the Tribute Quota-lists and the alliance between Athens and Leontini,⁶⁴ the *ἐργαστήριαι*-inscription at Petworth House,⁶⁵ the treaty concluded in 368/7 between Athens and Dionysius of Syracuse,⁶⁶ the Attic decree on weights and measures⁶⁷ and the statute of the Association of Iobacchi.⁶⁸ The Athenian archon-lists are discussed by Dragoumis⁶⁹ and Roussel⁷⁰; U. Wilcken re-interprets⁷² by the literary evidence two Attic documents discussed in Wilhelm's *Urkunden des korinthischen Bundes der Hellenen*; A. Wilhelm re-edits⁷³ an Attic decree now at Leyden. Of a number of minor contributions to Attic epigraphy no individual notice is possible here.⁷⁴ The chronology of the Attic archons of the third century B.C. continues to be a subject of acute controversy. A. C. Johnson, who has devoted himself with marked success to such studies, has argued⁷⁵ in favour of the date 265/4 for the archonship of Lysitheides (attributed by von Schoeffer to ca. 249/8) and of 266/5 for that of Philocrates.⁷⁶ In opposition to A. Mayer's claim⁷⁷ that *Pap. Herculan.* 339 settles the date of Euthius

⁵⁵ *Rh. Mus.* lxx. 389 ff.

⁵⁶ *Hermes*, li. 303 ff.

⁵⁷ *Id.* 478 f.

⁵⁸ *Id.* 479 f.

⁵⁹ *Id.* 630 ff.

⁶⁰ *Id.* lii. 225 ff.

⁶¹ *Id.* liii. 197 ff.

⁶² *Rev. Phil.* xl. 190 ff.

⁶³ *Class. Phil.* x. 65 ff.

⁶⁴ *Klio*, xv. 188 ff.

⁶⁵ *B. S. J.* xxi. 155 ff.

⁶⁶ *Arch. Ep.* 1915, 125 ff.

⁶⁷ *Hermes*, li. 120 ff.

⁶⁸ A. Elter in *Ostergrenns der chon. Friedr. W. H. Universität zu Bonn an den Angehörigen im Felde*, 1910, 87 ff.

⁶⁹ *Arch. Ep.* 1915, 5 ff.

⁷⁰ *Rev. Et. Gr.* xxix. 166 ff.

⁷¹ *Sitzb. München*, 1917, 10, 25 ff.

⁷² *Sitzb. Wien*, clixix. 6, 21 ff.

⁷³ *J. H. S.* xxxvi. 65 ff.; *Memorapne*, xlv. 395; *Woch. kl. Philol.* 1913, 867 ff.; *Arch. Ep.* 1915, 137 f.; *Lit. floz.* xlii. 219 ff.

⁷⁴ *Class. Phil.* xiii. 200 f.

⁷⁵ *Id.* x. 457 ff.

⁷⁶ *Philologus*, lxxi. 226 ff.

in accord with Ferguson and Kirchner, W. Kolbe has tried to show⁷⁸ that historically the date in question (287/6) is untenable and that in reality the papyrus confirms the later date (284/3) championed by Dittenberger, Koehler and himself: J. Kirchner answers these arguments and maintains the correctness of the earlier date.⁷⁹ Of the remaining works dealing wholly or partly with epigraphical materials Ferguson's short article on the secretary-cycle,⁸⁰ H. Oellacher's dissertation on the chronology of the Old Attic Comedy⁸¹ A. C. Johnson's examination of the financial administration of Athens from 307 B.C. down to the early part of the second century,⁸² and G. Giannelli's essay on the Romans at Eleusis⁸³ are all of considerable interest and value. We may also note C. Robert's suggestions⁸⁴ that the sculptor Pollios, whose signature occurs on two bases found amid the debris of the Persian invasion, is the Pollios mentioned by Vitruvius and Pliny and is the father of the vase-painter Euthymides, and O. Lagercrantz's examination⁸⁵ of the phrase *χαίρει καὶ πῖσι* on Attic black-figured cups. Of W. Laudemann's dissertation on some orthographical and grammatical questions raised by Attic inscriptions I cannot speak from personal knowledge.⁸⁶

Peloponnese.—P. Wolters' restoration⁸⁷ of a votive inscription on a number of vase fragments from the Aphaea Temple in AEGINA and W. Bannier's comments⁸⁸ on a well-known Aeginetan text call only for passing notice. On the other hand, important new finds from ARGOS have been published by W. Vollgraff. These include nine stones of the third century B.C. containing twelve decrees⁸⁹ in honour of foreigners, which give us our first complete examples of such decrees of this period, and thus enable us to rectify a number of texts hitherto imperfectly, or incorrectly, restored, as well as a decree passed before 251 B.C. in honour of Alexander of Sicyon, and another, probably of about 249–244 B.C., honouring the Rhodian state, which had on a previous occasion lent the Argives 100 talents free of interest for the repair of their walls and the completion of their cavalry force.⁹⁰ We owe to the editor a valuable discussion of the formulae of Argive decrees, of the Argive calendar, and of the subdivisions of the people and territory, together with a fresh examination of the famous arbitral verdict delivered by Argos in a dispute between Melos and Cimolus (*I.G.* xii. 3. 1259).⁹¹ W. Bannier suggests⁹² that the *Ἀίσχυλλος Θίοπος* of an Argive dedication (*I.G.* iv. 561) may be the same as Astylus of Croton, known to us from Plato and other authors. In his discussion of Wilhelm's *Urkunden des*

⁷⁸ *Is.* lxxiv. 58 ff.

⁷⁹ *Sitzb. Berlin*, 1918, 142 ff.

⁸⁰ *Atto*, xiv. 363 ff.

⁸¹ *Piemont Studien*, xxviii. 81 ff.

⁸² *Am. Journ. Phil.* xxvii. 424 ff.

⁸³ *Atti Acad. Torino*, I. xiv ff., 360 ff.

⁸⁴ *Jahrb.* xix. 241 f.

⁸⁵ *Brasão*, xiv. 171 ff.

⁸⁶ *De titulis atticis quædam orthographi-*

que et grammaticas, Kirchhals, 1915. Reviewed by E. Schwyzler, *Berl. phil. Week.* xxxvi. 1370 f.

⁸⁷ *Rh. Mus.* lxxi. 282 ff.

⁸⁸ *Berl. phil. Week.* xxxviii. 981 f.

⁸⁹ *Monisteyne*, xliii. 365 ff.

⁹⁰ *Is.* xlv. 219 ff.

⁹¹ *Is.* 46 ff.

⁹² *Berl. phil. Week.* xxxvii. 1443 f.

Korinthischen Bundes, U. Wilcken re-examines⁹⁶ a document from EPIDAUROS (*I.G.* iv. 924), which, he thinks, may relate to Alexander rather than to Philip of Macedonia, and may be dated in 330 B.C.: the text probably refers to the *συνθήκαι* of Alexander and the Greeks rather than to the decision to declare war upon Persia. O. Weinreich, returning⁹⁷ to the vexed question of the meaning of ΑΚΟΑΙ in Epidaurian and other texts, decides in favour of the concrete 'ears'.⁹⁸ The French excavations at Orchomenus in ARCADIA have brought to light, in addition to minor fragments, a statue-base of King Areus of Sparta,⁹⁹ a series of proxeny-decrees¹⁰⁰ engraved on bronze tablets, one of them honouring three Athenian envoys sent to the Peloponnese about 260 B.C. to prepare a coalition against Antigonos Gonatas, a valuable document¹⁰¹ edited with an ample historical and linguistic commentary, delimiting the frontier between Orchomenus and Methydrium in 369 B.C., when Methydrium passed over to τὸ Μεγαλοπολιτικόν, and the upper part¹⁰² of the famous stele (*I.G.* v. 2. 343) recording the *συνουσία* (dating probably from 360-350 B.C.) of Euacemonians and Orchomenians, and indicating an attempt on the part of the latter to discover some compensation for the transference of Methydrium, Thisoa and Teuthis to Megalopolis.¹⁰³ No new documents have been found at Tegea, but we owe to L. Weber a full discussion¹⁰⁴ of a Tegean epigram relating to the battle of Mantinea (v. 2. 173), to A. H. Smith a fresh publication¹⁰⁵ of the relief of Idrius and Ada (v. 2. 89), to E. Hermann an examination¹⁰⁶ of several Arcadian dialect forms, and to D. Comparetti a splendidly illustrated and most suggestive re-interpretation of the Xuthias-inscriptions (v. 2. 159).¹⁰⁷ A long article¹⁰⁸ by L. Weniger on the prophets at OLYMPIA begins with an examination of the Olympian official lists which survive for many years between 36 B.C. and 265 A.D., though the remainder of the article is based mainly upon literary evidence. LACONIA is represented only by O. Fiebiger's discussion¹⁰⁹ of the metrical epitaph (v. I. 1188) of Epaphrys, who, he thinks, fell fighting on the Roman fleet which assisted the Athenians to drive out the Herulian invaders in 267 A.D.¹¹⁰ On the western shore of the Gulf of MESSENIA, between Corone (Petalidi) and Asine (Coron), the site of the sanctuary of Apollo Corynthus has been excavated, disclosing the remains of five temples. The inscriptions¹¹¹ found here include a dedication to Apollo Corynthus, confirming the epithet which had been called in question, an archaic votive, some fragments of the late Roman period, and five archaic inscriptions on bronze or earthenware, one of which consists of the legend Μεθάρ[ισ] ἀνέθε[ε] 'Αθάνα[ι] [ἐκ] λαῖδος written retrograde on a bronze spear-head. In a masterly article of 120

⁹⁶ *Sitzb. München*, 1917, 10, 37 ff.

⁹⁷ *Hermes*, li. 624 ff.

⁹⁸ *Cl. Beibl. Phil. Week.* xxviii. 9821.

⁹⁹ *B.C.H.* xxxviii. 447 ff.

¹⁰⁰ *ib.* 449 ff.

¹⁰¹ *ib.* cxlix. 53 ff.

¹⁰² *ib.* 98 ff.

¹⁰³ *Cl. Indogerm. Forsch.* xxv. 90 ff.;

xxvi. 237 ff.

¹⁰⁴ *Hermes*, lli. 545 ff.

¹⁰⁵ *J.H.S.* xxvii. 65 ff.

¹⁰⁶ *Indogerm. Forsch.* xxv. 164 ff.

¹⁰⁷ *Asiatick.* li. 247 ff. *Cl. Arch. Δελτ.* ii. παράρτημα 74.

¹⁰⁸ *Arch. Rel.* xviii. 53 ff.

¹⁰⁹ *Nouv. Inscrip. Kl. Att.* xxxvii. 293 ff.

¹¹⁰ See also *Arch. Δελτ.* ii. παράρτημα 75.

¹¹¹ *Arch. Δελτ.* ii. 113 ff.

pages.¹⁰⁰ A. Wilhelm discusses two documents of the late second century B.C. from the *synthekion* of Messene,—the decrees in honour of the Secretary of State, Aristocles (*I.G.* v. 1, 1432), and the accounts of the *ἐκπώβολος εἰσφορᾶς* (1433), or tax of eight obols per mina (420 obols) necessitated by Roman demands—as well as two financial texts (1434, 1532) of the same period. The commentary, which deals with every point of epigraphical, numismatic and historical interest suggested by the valuable texts under discussion, splendidly exemplifies the extraordinary acumen and learning of their editor.¹⁰¹

Central and Northern Greece.—P. Graindor has published¹⁰² thirty epitaphs on thin rectangular tablets, all of which probably come from MEGARA, though the provenance of some is unrecorded or is attributed to Attica, and three fragments of a Megarian decree granting *προξενία* to a Megalopolitan, perhaps the commandant of the garrison of Nisaea in the service of Antigonus Gonatas. The yield of BOKOTIA is remarkably small. In a long article¹⁰³ on the Charopseum of Coronea, N. G. Pappadakis publishes thirteen manumissory dedications to Heracles-Charops, inscribed on two stelae of about 200 B.C., a further manumission and a fragmentary dedication from the same sanctuary,¹⁰⁴ and two manumissions of Thistae.¹⁰⁵ From Orchomenus A. Wilhelm publishes¹⁰⁶ two new texts of the second century B.C., the one a list, probably military, of 42 Orchomenians, the other containing two dedications of freedmen to Sarapis and Isis, as well as a fuller reading of a previously known text (*I.G.* vii. 3198, 3199). The only other new discoveries are a herm from Thespieae¹⁰⁷ bearing an epigram of the third century B.C., and a leaden ticket of admission¹⁰⁸ to the Oropian Amphiaraium. Wilhelm has discussed¹⁰⁹ a decree (vii. 395) from the same sanctuary in honour of Mnaseabes of Sicyon, in whom he sees the poet of that name, and a passage in a well-known document (vii. 235) of the same provenance. A lively discussion¹¹⁰ has centered round a metrical epitaph of Thespieae, while S. Lourié has examined¹¹¹ the status of the tenants of the Thespian public pastures who appear in a well-known inscription.¹¹² Phocis is represented by a single manumission-record from Hyampolia.¹¹³ From Eastern Locris, W. A. Oldfather has published¹¹⁴ nineteen new texts, mostly short epitaphs, together with notes on ten Locrian inscriptions previously known. H. Goldman has given us five inscriptions¹¹⁵ from the acropolis of Halae, including a sixth century votive epigram, an early fifth century dedication of a statue to Athena, and an interesting list of officials (ca. 260-250 B.C.).

¹⁰⁰ *Jahrbuch*, xvii. 1 ff.

¹⁰¹ See also *Apex*, Δελτ. ii. *κατασκευα* 73 ff.

¹⁰² *Rev. Arch.* vi. (1917), 31 ff.

¹⁰³ *Apex*, Δελτ. ii. 217 ff.

¹⁰⁴ *Ib.* 268 ff.

¹⁰⁵ *Ib.* 262 f.

¹⁰⁶ *Stich. H'ion*, *Stich.* 6, 3 ff.

¹⁰⁷ *Arch. Anz.* xxx. 298. A Thespian manumission is republished *Apex*, Δελτ. ii. 260 f.

¹⁰⁸ *Apex*, Ep. 1916, 119 f.

¹⁰⁹ *Stich. Wien*, *Stich.* 6, 3 ff.

¹¹⁰ *Berl. phil. Woch.* xxvii. 1442; xxxviii. 167 f., 979 f.

¹¹¹ *Rev. Et. Gr.* xxviii. 51 ff.

¹¹² Collin, *R.C.H.* xxi. 353 ff.

¹¹³ *Apex*, Δελτ. ii. 263 ff.

¹¹⁴ *Am. Journ. Arch.* xix. 320 ff.

¹¹⁵ *Ib.* 438 ff. Cf. *Class. Phil.* vi. 211 ff.

which contains the first epigraphical evidence for Halae as a member of the Boeotian League. Bannier has commented¹²² upon two famous archaic inscriptions found at Oeanthea (*I.G.* ix. 1. 333, 334), and now preserved in the British Museum,¹²³ and B. Keil has discussed¹²⁴ a difficult phrase in one of them, the colonial charter of Naupactus. The compact relating to 'the Locrian maidens' discovered at Tolophon and published¹²⁵ in 1913 by A. Wilhelm, has been re-examined¹²⁶ by W. Leaf, who points out that the inscription removes the thousand years' curse which had rested on the Aesantii ever since the fall of Troy and cancels the annual dispatch of two maidens to servitude in Troy. It lays down the conditions upon which the outlawry of the Aesantii and Naryca is rescinded and they are received into the Locrian community. An archaic epitaph has been discovered¹²⁷ at Vlachomandra by K. A. Romaios. An interesting series of eighteen texts from Thermum in AETOLIA has been edited¹²⁸ by G. Sotiriadis. Most of them consist of one or more records of the grant of *προξενία* or *πολιτεία* by the Aetolian League during the third and early second centuries B.C.; there are also four statue-bases, one of which bears the signature of Lysippus, and two boundary stones inscribed 'Ἀπόλλωνος Ἀσπίου and Ἀλίου Νίκαν Ἀσκληπιάδ'. A. Plassart¹²⁹ and K. A. Romaios¹³⁰ have published historical notes on several of these texts, and H. Pontow has dealt¹³¹ with the Lysippus signature, proving that it has no connexion with the dedication (of about 250 B.C.) which stands above it on the stone, and thus meeting the difficulty raised by Sotiriadis, who questioned the possibility of identifying the Lysippus of this signature with the great sculptor of that name. Among the recent discoveries from the west (Thyreum, Palaerus, Anactorium, Ambracia, etc.), described¹³² by K. A. Romaios, are a votive epigram to Pan and Priapus, an interesting *abacus*, a list of members of a religious society, and some forty epitaphs. A Philadelphens' excavations at Nicopolis¹³³ have disclosed a very early Christian basilica; the most interesting epigraphical find is a mosaic epigram.¹³⁴ D. Comparetti has discussed¹³⁵ a record of a gift to Dionys found at Dodona and Salonius, in a work inaccessible to me, has examined¹³⁶ the origin and language of the inscribed tablets discovered on the same site. O. Kern has corrected¹³⁷ a misreading of a text from Arta, published in *C.I.G.*, 1798. In the Ionian Islands no fresh discoveries have been made, but

¹²² *Rh. Mus.* lxx, 400 ff.

¹²³ *Ann. Græc. Inscr.* B.M. Nos. 953, 954.

¹²⁴ *Indogerm. Forsch.* xxxv, 236 ff.

¹²⁵ *Jahrbuch* xiv, 163 ff. Cf. *KG*, xii, 314 f. (Lehmann-Haupt); *Subrota*, i, (1913), 188 ff., 236 ff. (Corson); *Rev. Hist. Rel.* lxi, 12 ff. (A. Reinach).

¹²⁶ *B.S.A.* xxi, 148 ff.

¹²⁷ *Arch. Δελτ.* ii, επιμνημόεα, 46.

¹²⁸ *ib.* i, 45 ff.

¹²⁹ *B.C.H.* xxix, 127 ff.

¹³⁰ *Arch. Δελτ.* i, 280 ff.

¹³¹ *Jahrb.* xxxii, 133 ff.

¹³² *Arch. Δελτ.* ii, επιμνημόεα, 47 ff.

¹³³ *Πρακτικά*, 1913, 68 ff.

¹³⁴ *Arch. Έφ.* 1916, 33 ff., 65 ff.; *Arch. An.* xxii, 148 ff.

¹³⁵ *Annuaire*, ii, 259 ff.

¹³⁶ *Parce de origine et sermone tabularum Dodonae effusarum*, Helsingfors, 1915. Reviewed *Berl. phil. Woch.* xxvii, 392 f. (O. Hoffmann).

¹³⁷ *Hermes*, lvi, 146 f. Cf. *Arch. Έφ.* 1915, 33.

Kern,¹⁴¹ Comparetti,¹⁴² and Bannier¹⁴³ have re-examined and corrected previously known Coreyraean inscriptions.

The most important epigraphical contributions, however, are those of DELPHI and Thessaly. The new Delphian texts include, amongst others,¹⁴⁴ an important fragment of the letter of Spurius Postumius Albinus, praetor in 189 B.C., accompanying the *Senatusconsultum* passed in favour of Delphi,¹⁴⁵ and a document¹⁴⁶ recording the grant of honours to the first Attalids, which brings a welcome confirmation of Cardinali's *stemma* of the Attalid house. H. Pomtow has continued his publication of 'Delphische Neufunde' in two articles, the first of which¹⁴⁷ contains 69 texts, the great majority not previously published, including the oldest extant Delphian list of *θεαροδόχοι* (No. 33), a dossier relating to a frontier dispute between Eretria, Chalcis and Carystus (39, 40), decrees in honour of a Cretan organist, a Theban χοροφάτρια and a Roman astrologer (51, 52, 61), a mutilated poem recording an Apolline miracle (65), a Samian thank-offering (ca. 500/490 B.C.) for freedom from the Persian yoke (87), and a monument of Hermesianax of Tralles and his three daughters, who won victories in running, chariot-racing and singing at the Pythia and other festivals during the early years of Claudius' reign (101). The other article,¹⁴⁸ in which six new texts are published, deals with the relations of Delphi with Hippocrates and the Aesclepiadae and includes a critical examination of the Hippocratic *προσβερτιός* and of its value for the history of the First Sacred War.¹⁴⁹ To R. Haussoullier is due a masterly edition¹⁵⁰ of the extant fragments of a treaty concluded between Delphi and Pellana (Pellene in Achaia) in the first half of the third century B.C., which affords interesting details regarding the settlement of inter-state disputes; a chapter is added discussing the situation, monuments, products and political institutions of Pellana and its relations to Delphi. In an essay¹⁵¹ on the inscriptions of Cleobis and Biton, C. Robert supports the reading *δινῶν* (= *ζυγῶν*) against *δινῶν* or *δ'ινῶν* and argues that Cleobis and Biton were Delphians who introduced a new cult and that the 'mother' brought τῶν ζυγῶν was a Mother-goddess, perhaps Leto or Demeter. On several other Delphian texts fresh and valuable light has been thrown by E. Bourguet,¹⁵² M. Holleaux¹⁵³ and other scholars.¹⁵⁴ G. Klaffenbach, while accepting Holleaux's interpretation¹⁵⁵ of the title στρατηγὸς ἡ ἀρχιπαις, differs from him regarding the date of Sisenna's government

¹⁴¹ *Hermes*, lii, 147 f.

¹⁴² *Anuario*, li, 202 ff.

¹⁴³ *Bull. phil. Week*, xxvii, 1440 ff.

¹⁴⁴ *Rev. Ét. Anc.* ix, 90 ff.

¹⁴⁵ *Rev. Arch.* vi, (1917), 342 ff.

¹⁴⁶ *Rev. Ét. Anc.* xx, 9 ff.

¹⁴⁷ *Klio*, xv, 1 ff.

¹⁴⁸ *ib.* 203 ff.

¹⁴⁹ *ib.* 314 ff.

¹⁵⁰ *Traité entre Delphes et Pellana*, Paris

(Champion), 1917.

¹⁵¹ *Stich. München*, 1916, 2, 3 ff.

¹⁵² *Rev. Arch.* vi, (1917), 339 ff.

¹⁵³ *Rev. Ét. Anc.* xxi, 237 ff., xix, 77 ff., 92 ff., 137 ff.

¹⁵⁴ *Klio*, xiv, 468 ff.; *Hermes*, lii, 142 ff.; *ib.* 110 ff.; *RA. Mus.* lxx, 395 f.; *Att. Acad. Turca*, xlix, 680 ff.

¹⁵⁵ *Hermes*, xlix, 581 ff.; *Rev. Ét. Anc.* xix, 157 ff.

of Macedonia.¹²⁶ A. C. Johnson has put forward a solution of some problems of Delphian chronology¹²⁷ during the Aetolian domination based upon the Amphictyonic decrees: a careful study of these in the light of the internal position of Athens, Eretria and Sicyon enables the writer to fix the beginning and the duration of the Chremonidean War and to draw up a revised list of Delphian archons, councillors and hieromnemons for the years 302-240 B.C. M. Bloch's dissertation¹²⁸ on the conditions of manumission contained in the Delphian records and A. Boethius' study of the Pythais¹²⁹ are both inaccessible to me. Seventy-one new texts from THESSALY have been edited by A. S. Arvanitopoulos and N. Giannopoulos. Sixteen of these, for the most part very fragmentary, are from Gonni,¹³⁰ fourteen votive, manumissory and funerary inscriptions are from Gonnocandylum-Olympias¹³¹ and eighteen from Oloösön, Phalanua and Metropolis.¹³² The remainder were discovered at Demetrias,¹³³ Nea Anchialos,¹³⁴ Phthiotic Thebes,¹³⁵ Halus, Pyrasus, Pharsalus and elsewhere.¹³⁶ Numerous documents previously known have been more fully and correctly deciphered or restored and more adequately explained¹³⁷; special interest attaches to P. Boesch's two articles¹³⁸ in which the *theorodokos*-inscription of Gonni, which confirms the contention of Foucart and Rutgers van der Looff that the *Ἐλευσίνια* and the *Μυαθήνια* are not identical, is examined and several cognate questions and texts are discussed. Giannopoulos has collected a large number of objects bearing signs which he attributes to a prehellenic Thessalian script.¹³⁹ Arvanitopoulos has drawn up an alphabetical list of the *ταμίαι* of Oloösön¹⁴⁰ and a table of concordance¹⁴¹ between the numbers given to inscriptions in the Gonni Museum and those under which they have been published in the *'Αρχ. Ἐφ.* Two questions of the Thessalian dialect have been examined by E. Hermann.¹⁴²

Islands of the Aegean.—The year 1915 saw the publication of the long expected fascicule¹⁴³ of the *Inscriptiones Graecae* devoted to EUBOEA. This is edited by E. Ziebarth and fully maintains the best traditions of the monumental work of which it forms a part. It comprises 1279 texts, of which apparently all but 310 had been previously published, and though the number of historically important documents is small, it affords abundant

¹²⁶ *Hermes*, li. 475 ff.

¹²⁷ *Am. Journ.*, LIV. xxvii. 145 ff.

¹²⁸ *Die Freilassungsbedingungen der delph. Freilassungsurkunden*, Strasbourg, 1915.

¹²⁹ *Die Pythais*, Upsala (Ålquist and Wiksell), 1918. Reviewed *Class. Rev.* xxviii. 1131 (A. C. Richards). Cf. *'Αρχ. Ἐφ.* 1915, 5 ff.

¹³⁰ *'Αρχ. Ἐφ.* 1915, 8 ff.

¹³¹ *Ib.* 16 ff.

¹³² *Ib.* 1916, 17 ff., 73 ff.

¹³³ *Spawick*, 1915, 188.

¹³⁴ *'Αρχ. Ἐφ.* 1915, 99 ff.

¹³⁵ *Ib.* 75, 82.

¹³⁶ *Ib.* 74 ff.; 1916, 61 f.

¹³⁷ *'Αρχ. Ἐφ.* 1915, 78; 1916, 17 ff., 73 ff.; *Class. Rev.* xlii. 196 f.; *Pal. Expl. Fund. Q.S.* 1915, 203 ff.; *Berl. phil. Week.* xxxvii. 1443 ff.; xxxviii. 182.

¹³⁸ *Hermes*, lii. 120 ff. 628; *Berl. phil. Week.* xxxvii. 153 ff.

¹³⁹ *'Αρχ. Ἐφ.* 1915, 97 ff.

¹⁴⁰ *Ib.* 1916, 91 f.

¹⁴¹ *Ib.* 1915, 28 ff.

¹⁴² *Indogerm. Forsch.* xxv. 166.

¹⁴³ xii. B. Berlin (Pölsner); 41 M. Reviewed by W. Bannier, *Berl. phil. Week.* xxxvi. 1225 ff.

material for the study not only of the Euboean alphabet and dialect but also of the Greek personal and local names. Valuable additions have been made to Euboean epigraphy by the publication¹²¹ of the inscriptions discovered by N. Papadakis during his excavation of the Eretrian Iseum,— notably a number of dedications to Isis, alone or in conjunction with other Egyptian gods, an inscription set up in honour of a hereditary priest by τὸ κοινὸν τῶν μελανηφόρων καὶ ὑποστόλων, a subscription-list, two third-century catalogues of ἑφηβοί and a list of 49 men and 43 women who officiated as ναύαρχοι in connexion with the worship of Isis. An Eretrian epigram (*I.G.* xi. 9, 287) has been discussed by S. Witkowski,¹²² R. A. Mulley¹²³ and W. Bannier,¹²⁴ and a list of Eretrian dames, containing 54 certain and nine doubtful names, has been drawn up and annotated¹²⁵ by A. S. Georgiadis.

Of the islands in the Northern Aegean Thasos alone is represented. G. P. Oikonomos refers¹²⁶ to several Thasian finds of which a fuller publication will doubtless follow and P. Roussel arrives independently¹²⁷ at the conclusion previously reached by A. Reinach,¹²⁸ that the inscriptions interpreted as referring to female painters in Thasos have been misunderstood and in reality indicate only that the ladies gave orders for, and defrayed the cost of, the paintings.

From the CYCLADES we may note P. Graindor's publication¹²⁹ of a 'law' regulating admission (*νόμος ἐσαγωγῆς*) into a Tenian association, perhaps Dionysiac in character, dating probably from the early fourth century B.C., his rejection¹³⁰ of Wilhelm's emendations of a Tenian magistrates' list previously published by him,¹³¹ A. Körte's fresh discussion¹³² of a Cean victor-list (*I.G.* xii. 5, 608) of about 400 B.C. which is of considerable importance for the chronology of Baechylides and F. Hiller von Gaertringen's proposal¹³³ for the restoration of an interesting religious taboo from Paros (xii. 5, 225).

The inscriptions of Delos have afforded to P. Roussel his principal material for two important books. One of these,¹³⁴ which deals with the Egyptian cults in Delos from the third to the first century B.C., I have been unable to examine. The other,¹³⁵ devoted to the history of Delos from 166 B.C., when the Athenians acquired the island, to their abandonment of a possession which after the disasters of 88 and 69 B.C. ceased to be profitable, is very full and interesting. After an introduction, which includes (p. 21 ff.) a general account of the epigraphical sources, the author treats of the

¹²¹ *Arch. Δελ.* i. 113, 128, 141, 148 ff. Cf.

Berl. phil. Week. xxxvi. 383 ff. (Zielharth).

¹²² *Berl. phil. Week.* xxxv. 1280 f.

¹²³ *Jb.* 51 ff.

¹²⁴ *Jb.* xxxvi. 1927 f.; xxxvii. 1442 f.

¹²⁵ *Arch. Ep.* 1105, 49 ff.

¹²⁶ *Arch. Δελ.* ii. 222 ff.

¹²⁷ *Rev. Et. Gr.* xxi. 151 ff.

¹²⁸ *Rev. Ep.* ii. 251 ff.

¹²⁹ *Rev. Arch.* vi. (1917), 54 ff.

¹³⁰ *B.C.H.* xxxvii. 441 ff.

¹³¹ *Museo Belg.* vi. 253 ff.

¹³² *Hermes* lxxi. 119 ff.

¹³³ *Berl. phil. Week.* xxxvi. 796 f.

¹³⁴ *Les cultes égyptiens à Délos de 117 av. J.C. au I^{er} siècle av. J.C.*, Paris (Berger-Levrault), 1916. Borrowed by H. I. Bell, *Journ. Arch.* v. 142 f.

¹³⁵ *Delos. Colonie Athénienne*, Paris (Fontemoing), 1916.

provenance and organization of the Delian population, the Athenian administration, the cults and priesthoods, the buildings and monuments of the period, the catastrophes of 88 and 69, and the decay of Delos. Of peculiar value are the three appendices, of which the first discusses the chronology of the Attic archons of the second and first centuries, the second summarizes the chief administrative documents of the period, and the third contains 63 new texts,—an Attic decree and 62 votive inscriptions from the Syrian sanctuary, the temple of the *Μεγάλοι Θεοί* and other sites. A. Plassart has republished¹⁰⁰ his article on the synagogue at Delos, which appeared in the *Mélanges Holleaux*; A. E. R. Boak has examined,¹⁰¹ at some length, the status and functions of the *magistri* of Campania and Delos, maintaining that the Delian 'masters' were not presidents of religious associations but *magistri fani*, annual officials appointed by the colony to supervise the shrines and cults of certain divinities, and M. Lacroix has reconstituted¹⁰² the *stemma* of an important Delian family of bankers and timber merchants, together with those of six other closely allied families. On epigraphical grounds, F. Comby attributes¹⁰³ the dedication of Antigonus' portico at Delos to 254 or 252 B.C. E. Ziebarth gives some account¹⁰⁴ of twenty-four Delian trust-funds (B. Laun, in his recent work *Stiftungen in der griechischen und römischen Antike* discusses only four), the special interest of which lies in the fact that their operation can be traced over a long period, amounting in one case to at least 130 years. G. Glotz in an interesting article¹⁰⁵ shows how the price of pitch, recorded for various years between 310 and 169 B.C., accurately reflects the fluctuations of Delos' political relations with Macedon, which enjoyed a monopoly of pitch production, and how the famine price of 40 drachmae paid in 279 actually fixes the disputed chronology of the Delian archons of the period of the island's independence. On several Delian documents M. Holleaux has thrown fresh and valuable light,—on the dedication¹⁰⁶ of a statue of the orator M. Antonius, consul in 90 B.C., who is termed *στρατηγὸς ἑκαστος*, probably the latest extant epigraphic example of this title, on the honours paid by Prasiaenna, in Psidia, to the same man,¹⁰⁷ who went to Asia as quaestor in 113 B.C., on the decree of the Cretan auxiliaries of Ptolemy Philometor in honour of "Ἀγλαὸς Θεοκλέους, known also from coins and inscriptions of Cos and Calymna, and on the closely related question of the date of the *Κρητικὸν πολέμῳ*, mentioned in a decree of Halasarna (Cos), and in a dedication of Naxos (*I.G.* xii. 3. 103).¹⁰⁸ In his *Neue Beiträge zur griechischen Inschriftenkunde*, IV, A. Wilhelm calls attention¹⁰⁹ to a Delian decree at Leyden which has been omitted from *I.G.* xi. 4, and discusses¹¹⁰ the regulation for the sale of charcoal and wood, maintaining against the French editors that nothing has been lost at the

¹⁰⁰ *Rev. Hist.* xi. 523 ff. Cf. *Paq. Epig.*
Fund. Q.S. 1915, 201 ff.

¹⁰¹ *Class. Phil.* vi. 25 ff.

¹⁰² *Rev. Et. Gr.* xvix. 188 ff.

¹⁰³ *B.C.H.* xxxviii. 206 ff.

¹⁰⁴ *Hermes*, lli. 425 ff.

¹⁰⁵ *Rev. Et. Gr.* xix. 281 ff.

¹⁰⁶ *Rev. Et. Gr.* xix. 83 ff.

¹⁰⁷ *Id.* xli. Cf. 95 ff.

¹⁰⁸ *Rev. Et. Gr.* xxix. 88 ff.

¹⁰⁹ *Sitzb. Wien.* cxix. 6, 20 ff.

¹¹⁰ *Id.* 22 ff.

beginning of the extant text. R. Vallois republishes²⁹⁰ with a full commentary, a curse-inscription of about 250 B.C. (*I.G.* xi. 1296), and in an interesting essay, modifying and supplementing Ziebarth's article on the subject,²⁹¹ examines the literary and epigraphical evidence for the Greek *ἀπά*.

Hiller von Gaertringen has pointed out²⁹² that the term *εὐεργέται* in an inscription of THERA (*I.G.* xii. 3. 465) may refer to the Romans and not, as hitherto understood, to Ptolemy III and Berenice. The new inscriptions from CRETE are few in number and slight in interest, with the exception of a dedication from Gortyn²⁹³ and a dialect building-record (second century B.C.) from Lato *πρὸς Καμάρα*.²⁹⁴ Several inscriptions have been corrected or interpreted,²⁹⁵ the Orphic poems from Eleutherna have been re-edited²⁹⁶ by A. Olivieri, and the clauses of the Code of Gortyn dealing with rape and adultery have been discussed²⁹⁷ by L. Gernet. Of epigraphical materials for the study of the Cretan dialect, E. Fraenkel's contribution to the *S.G.D.I.* has already been noticed, and only E. Hermann's notes²⁹⁸ on *psilosis* in Central Crete still call for mention.²⁹⁹

K. Kourouniōtis' excavations and researches in CHIOS have produced³⁰⁰ together with other interesting results, not only valuable corrections of and additions to inscriptions previously published, but also eight new texts from Phanae and Cardamyle, and an interesting decree and contribution-list of the early third century (I) from the fort of Chios. Thanks largely to the activities of Italian archaeologists, the number of new inscriptions from RHODES is considerable. A. Maiuri has published³⁰¹ a Greco-Phoenician votive and 187 other Greek texts (only nine of which were previously known), found in the Sporades and now preserved in the Archaeological Museum at Rhodes;³⁰² the great majority of these (Nos. 27-187) are short epitaphs (No. 27 dates from the first half of the fifth century B.C.), and the remainder are mostly votive or honorary inscriptions, including a long list of distinctions granted to some unknown person in the third century B.C., interesting for the names of religious and gentile associations which it contains (No. 10). One building-inscription and 22 epitaphs have been published³⁰³ by G. C. Porro and 17 funerary and other texts by M. D. Chaviaras.³⁰⁴ Rhodian stamped amphora-handles have recently attracted a good deal of attention, and the valuable work of Nilsson and Bleckmann has put their study upon a firm basis. G. C. Porro has edited³⁰⁵ 602 such stamps found at Kalavarda, in the territory of Camirus, of which four belong to Thasos, four to Olbia, two to Cnidus, and thirteen bear simple *sigla*, while the remaining 579 are certainly

²⁹⁰ *B.G.H.* xxxviii. 256 ff.

²⁹¹ *Hermes*, xxi. 57 ff.

²⁹² *Hermes*, li. 470 f.

²⁹³ *Annuario*, ii. 311 f.

²⁹⁴ *Apex*, 'Ep. 1915, 51 f.; *Annuario*, ii. 359 ff.; *Apex*, *Δελτ.* ii. 1 ff.

²⁹⁵ *Apex*, 'Ep. 1915, 32, 94; *Hermes*, iii. 475.

²⁹⁶ *Camelliae aures* Orphicae, Bonn (Marx and Weber).

²⁹⁷ *Rev. Ét. Gr.* xxix. 383 ff.

²⁹⁸ *Indogerm. Forsch.* xxxv. 167 ff.

²⁹⁹ For Gortyn cf. *Atene e Roma*, xviii. 49 ff.

³⁰⁰ *Apex*, *Δελτ.* i. 76, 84, 91 ff.; ii. 213 ff.

³⁰¹ *Annuario*, ii. 267 ff.

³⁰² *Ib.* 133 ff.

³⁰³ *Ib.* 125 ff.

³⁰⁴ *Apex*, 'Ep. 1915, 128 ff. No. 1 = *Annuario*, ii. 136. No. 2.

³⁰⁵ *Annuario*, ii. 103 ff.

Rhodian. J. Paris has published²¹⁰ a collection of 262 similar stamps found in, or near, the capital, and now in the possession of the Scolasticat des Frères des Écoles Chrétiennes, at Rhodes. The publication of the Petrograd collection has already been referred to. B. Keil has examined²¹¹ from the stylistic point of view, Timachidas' narrative of the ἐπιφάνεια of Athena Lindia contained in the famous Lindian temple-chronicle, and concludes that the laws of style formulated for the κοροί had by about 100 B.C. been applied to the Dorian κοροί, as written at Rhodes, and that it is possible to infer the character of the instruction given by the famous teacher of style and rhetoric, Apollonius ὁ μαλακός. F. B. Tarbell calls in question²¹² the interpretation and the provenance of a vase-inscription purporting to come from Rhodes. Of the neighbouring STORADES, Syme, Cos, Patmos, Lavinthos, and Leipsia have produced twelve inscriptions, edited by N. D. Chavarras,²¹³ and Teles a dedication to Hadrian.²¹⁴

Asia Minor.—In a long and valuable article²¹⁵ on 'The Utilisation of Old Epigraphic Copies,' W. M. Ramsay has emphasized the importance, and defined the methods, of restudying copies of inscriptions made by the older travellers, such as Lucas and Hamilton: twenty-eight previously published texts from Karia, Iadik, and elsewhere are discussed and corrected, and a boundary stone (ὅροι γυμνασίου ἱππικῶν) of about 400 A.D. is published for the first time.²¹⁶ D. Eury's Evans' notes on the consonants in the Greek of Asia Minor²¹⁷ draw their material largely from epigraphical sources. Of the sculptured monuments of the Μέρη-cult from Asia Minor, described and discussed²¹⁸ by J. Keil, five bear brief dedicatory inscriptions, of which two were not previously published.

In his 'Studies in Hellenistic History' M. Holleaux has shown²¹⁹ that the alleged conflict between the Lampasænes and the Galatians in 197/6 B.C. is due to an untenable restoration of a famous decree of Lampasæus (*S.I.G.*² 276) and that²²⁰ the foundation of the Nicephoria is proved by Polybius and by Pergamene inscriptions to belong to the period 226-3 B.C.

The inscriptions discovered in the Delphinium at MILETUS continue to attract attention and study,²²¹ especially that relating to the Milesian *μολποί*,²²² who, according to W. Vollgraf, constitute a society, or corporation, so wide as to include practically all Milesian citizens.²²³ Valuable work has been done by J. Keil on the inscriptions of EPHESUS. Three wall-blocks of the Atrienium, inscribed with twenty-eight more or less complete decrees

²¹⁰ *Revue de l'Épigraphie*, 1916, 309 ff.

²¹¹ *Revue de l'Épigraphie*, 1916, 491 ff.

²¹² *Class. Phil.* 1916, 100 f.

²¹³ *Arch. Ep.* 1915, 131 ff.

²¹⁴ *Annuaire de l'Épigraphie*, 1916, 121. For Cos and Nigyras see also *Rev. Ét. Gr.* 1915, 88 ff.

²¹⁵ *J.H.S.* xxviii, 124 ff. Cf. *Class. Rev.* 1917, 7 f.

²¹⁶ *J.H.S.* xxxvii, 133 ff.

²¹⁷ *Class. Quart.* 1916, 162 ff.

²¹⁸ *Jahresh.* 1916, 66 ff.

²¹⁹ *J.H.S.*—VOL. XXXIX.

²²⁰ *Rev. Ét. Gr.* 1916, 1 ff.

²²¹ *Id.* 176 f.

²²² *Jahresh.* xvii. Beibeh., 257 ff.; *Rev. Ét. Gr.* 1915, 180 ff.; *Ann. Acad. Torino*, 1915, 1226 ff.

²²³ *Real. phil. Week.* xxxviii, 977 ff.; *Epigraph.* 1916, 1 ff.

²²⁴ *Revue de l'Épigraphie*, 1916, 413 ff. Cf. for Miletus F. Meiser, *Inscriptiones Milesienses de pace cum Magnesia facta*, Augsburg, 1914.

granting citizenship and *προξενία*, afford us our earliest extant examples of Ephesian decrees (before 321 B.C.) and of the Ephesian *κοινή* still marked by sporadic Ionic forms.²²⁰ A new list²²¹ of the Ephesian *χλειαῖοι* gives us thirty-one names distributed among six tribes; an article²²² dealing with the excavations of 1913 contains two interesting honorary inscriptions, four fragments of a votive text to Ephesian Artemis and the Augusti, and the dedication by the Ephesian *δῆμος* of *ἡ ἀφιερωτά καὶ τὰ πέντε ἀγάλματα σὺν τοῖς βασιλεῦσι*, and the inscription²²³ on an altar of the third century of our era contains the title *Δαίτῃ* applied to Aphrodite, known hitherto only from the *Etymologicum Magnum*. We must also notice E. Weiss's full discussion²²⁴ of the juristic aspect of the important document engraved on the Register Office, *ἀντιγραφείον*, at Ephesus,²²⁵ recording the fees payable for various official registrations, etc., P. Foucart's identification²²⁶ of 'the hero Heropythus,' whose cult is attested by an Ephesian inscription, with the democratic leader, who, after the battle of Chaeronea and the advent of Parmenio in Asia Minor, proclaimed the freedom of Ephesus, and M. Halleaux's discussion²²⁷ of the decree of Ephesus relating to the Etrurian defenders of *ὁ Χάραξ*. To the new edition of the long inscription of Catus Vibius Salutaris reference has already been made. The remaining cities of IONIA are not so largely represented. P. Roussel has commented²²⁸ on the phrase of *Πομπαιοί* in epitaphs of Teos and Erythrae; A. Wilhelm has adduced arguments²²⁹ in favour of the Clazomenian origin of an interesting historical text usually assigned to Erythrae (Hicks and Hill, No. 159), and has interpreted²³⁰ an inscription of Magnesia on the Maeander defining the conditions on which a public weighing apparatus in the market-place was leased to a contractor; J. Keil has published²³¹ an inscribed sepulchral relief of the first half of the first century B.C. from the same site; T. Macridy and C. Picard in an account²³² of the excavation of the temple of Clarian Apollo at Colophon, publish a third-century decree referring to Colophon *ἡ ἐπὶ θαλάσσει*, and add notes on the 125 texts discovered in the temple precincts.

Under the title 'Lydian Records' W. H. Buckler has edited²³³ 27 inscriptions from various sites in LYDIA (Philadelphia, Mermere, Thyatira, Hierocaesarea, etc.), of which only five were previously published, and those incorrectly or incompletely; some of these, as for example the epitaph of Praxias (No. 8), are of considerable interest. The same scholar has republished²³⁴ with restorations and a full commentary five Lydian propitiatory texts and has added a sixth previously unknown, and F. Cumont has discussed²³⁵ a somewhat similar dedication to Anaitis from

²²⁰ *Jahrbuch*, xvi, 237 ff.

²²¹ *ib.* 245 ff.

²²² *ib.* xviii, Beiblatt, 279 ff.

²²³ *ib.* xvii, 145 ff.

²²⁴ *ib.* xviii, Beiblatt, 285 ff.

²²⁵ *ib.* vii, Beiblatt, 44.

²²⁶ *Rev. Philol.* xlii, 66 ff.

²²⁷ *Ann. Éc. des. sc.* xix, 29 ff.

²²⁸ *ib.* 179 ff.

²²⁹ *Sitzb. Wiss. Akad.* 9, 20 ff.

²³⁰ *ib.* 38 ff.

²³¹ *Jahrbuch*, xi, 178 ff.

²³² *B.C.H.* lxiix, 23 ff.

²³³ *J.H.S.* xxxvii, 88 ff.

²³⁴ *B.S.A.* xxi, 109 ff.

²³⁵ *C.B. Acad. Ins.* 1915, 270 ff.

near Kula illustrating the domination of sun worship and the syncretism characteristic of paganism in the second and early third century. Though falling strictly outside the scope of this article I cannot refrain from mentioning the articles of S. A. Cook²²⁶ and O. A. Danielsson²²⁷ on the Lydian-Aramaic bilingual text, the most interesting of the fifteen Lydian documents published²²⁸ in the official account of the American excavations at Sardis. A Brinkmann has commented²²⁹ on two inscriptions from the temple of Zeus Panamurus at Stantonicea in CARIA. A Wilhelm has thrown valuable light on a text from Iasus recording the foundation of a trust-fund.²³⁰ M. Holleaux has referred to an inscription of Tralles²³¹ and has shown²³² that the author of the well known letter to Hieracles sub Latmo is not, as is generally held, Cn. Manlius Voiso but probably one of the consuls of 188 B.C., and P. Roussel has annotated²³³ an inscription of Loryma in the Rhodian Peraea. The famous epitaph of Abercius, Bishop of Hierapolis in PAPHLAGIA, forms the subject of an article²³⁴ by L. Saint-Paul and of a note²³⁵ by W. M. Ramsay. The grammar of the Greek inscriptions of LYCIA, about a thousand in number, has been fully treated in a careful dissertation²³⁶ by K. Hauser. J. Sundwall's monograph on the native Lycian names²³⁷ and W. Ackwright's notes²³⁸ on the Lycian alphabet call for a passing mention, as also A. Wilhelm's suggested correction of two Greek inscriptions from Lycia.²³⁹ To Wilhelm we also owe²⁴⁰ a number of valuable comments on and emendations of texts from Southern Asia Minor recently published by Paribeni and Romanelli (cf. *J.H.S.* xxxv. 268). M. Holleaux has published²⁴¹ notes on the letter of Attalus (II) to the citizens of Amlada (Dittenb. *O.G.I.* 751) and A. Hadjis has suggested²⁴² a small correction in a text of Attalia. Twenty-four inscriptions of Castellorizo (Megiste) and nine which have been brought to that island from the neighbouring mainland have been collected and edited²⁴³ by a French naval officer and discussed by M. R. Savignac and E. Michon.²⁴⁴ In their provisional account²⁴⁵ of a journey in CILICIA, J. Keil and A. Wilhelm include a preliminary publication of various documents, notably a new fragment of the record of honours paid to Eulemus of Seleucia on the Calycadnus, an important functionary at the court of Antiochus IV Epiphanes, an interesting decree in honour of a priest

²²⁶ *J.H.S.* xxvii. 77 ff., 219 ff.

²²⁷ *Ze den lykischen Inschriften*, Uppsala: 1 kr. 50 öre.

²²⁸ *Sardis*, Vol. VI., part 1. By E. Lammiman, Leyden (Brill), 1916.

²²⁹ *Rh. Mus.* lxxii. 169.

²³⁰ *Sinh. Wien*, lxxix. 6, 42 ff. Cf. *Not. Epigraphicae*, vol. 1.

²³¹ *Ber. El. Anc.* xviii. 247.

²³² *Id.* xix. 237 ff.

²³³ *Rev. Et. Gr.* xlix. 194 f.

²³⁴ *Rev. Philol.* xlii. 28 ff.

²³⁵ *J.H.S.* xxxvii. 190 f.

²³⁶ *Grammatik der griechischen Lykische*, Bale (Birkhäuser), 1916.

²³⁷ *Die einheimischen Namen der Lykier*, 1913.

²³⁸ *J.H.S.* xxxv. 100 ff.

²³⁹ *Sinh. Wien*, lxxix. 6, 63 f.

²⁴⁰ *Id.* 53 ff. Cf. *Jahresh.* xviii. Beihlatt, 6.

²⁴¹ *Rev. Et. Anc.* xx. 17 ff.

²⁴² *Arch. Pa.* 1915, 32.

²⁴³ *Rev. Philol.* xiv. 287 ff.

²⁴⁴ *Id.* 298 f., 533, 546 ff.

²⁴⁵ *Jahresh.* xviii. Beihlatt, 1 ff.

of Athena ἐν Τάφαις and a dedication from Anazarba dated 92/93 A.D. in which Domitian is honoured as Dionysus Καλλίκαρπος and a new Governor of Cilicia, Q. Gellius Longus, appears. From Cyprus there is little to notice. M. Mackidēs records²⁰⁰ the acquisition by the Nicosia Museum of the dedication to Zeus Ὀρομύρας (cf. *J.H.S.* xxxv. 269) and of a new fragment from Fromatos, while E. Hermann²⁰¹ and W. Bannier²⁰² discuss points raised by texts in the Cyprian syllabic script. In northern Asia Minor²⁰³ I need only mention nine Greek inscriptions from Sinope, of which three were previously known, published²⁰⁴ by T. Reinach after copies which appeared in a local Greek periodical; they include the bilingual epitaph of an ex-centurion from Carnuntum and a statue-base of a Sinopean boxer with a list of the 200 victories won by him in various contests in Italy, Sicily, Greece and Asia. I have been unable to consult R. Leonhardt's work²⁰⁵ on Paphlagonia.

Outlying Regions.—The number of new Greek inscriptions from ITALY is surprisingly small. Six Rhodian amphora-handles and two *pyxidi* have come to light at Oria²⁰⁶; at Rome five epitaphs have been discovered²⁰⁷ in addition to the four unpublished texts (Nos. 1674, 1689, 1761, 1853) included in the supplementary volume of de Rossi's *Inscriptiones Christianae*²⁰⁸. Otherwise only the potter's signature on a vase from Vignanello²⁰⁹ and the two Paratheniac amphorae of the late sixth century from Iasri Epizephyri²¹⁰ call for notice here. On the other hand, the interpretation of previously known documents has made marked progress. The three Orphic texts found in tombs at Thurii form the subject of a considerable dissertation²¹¹ by J. H. Wioten, while all the inscriptions of this class—from Thurii, Potelun, Rome and Eleutherna (Crete)—are collected and edited in one of Lietzmann's excellent *Kleine Texte*.²¹² F. Cumont has dealt afresh²¹³ with the dedication of Gaïus δερνοκέρης, the Syrian *vishāh* Augustorum in Commodus' reign, found in the *Lacus Furrinus* on the Janiculum; J. Olford gives some account²¹⁴ of the Jewish inscriptions collected in the new hall of the Christian Museum of the Lateran devoted to Hebrew records; C. A. Hutton supports the genuineness of the Apollonius-signature (*J. G.* xiv. 132*) at Petworth House²¹⁵; other

²⁰⁰ Cyprus. *Annual Report of the Director of Antiquities, Nicosia*, 1917.

²⁰¹ *Isidorigen. Parva* xxxv. 1661.

²⁰² *Ber. phil. Week.* cxcvii. 1446 ff.

²⁰³ I must G. de Jersphanion's article on Cappadocian and Pontic Inscriptions in *Mélanges de Beyrouth*, all since this work is inaccessible to me.

²⁰⁴ *Ber. Arch.* iii. 11910, 129 ff.

²⁰⁵ *Paphlagonia*, Berlin (Reimer), 1912, 26 M. Reviewed *Ber. phil. Week.* xxxvii. 798 ff. Cf. *Litzg.* 1912, 244 ff.

²⁰⁶ *Mon. Aus.* xxvii. 446 ff., 464 ff.

²⁰⁷ *Notiz.* 1915, 32, 167; 1917, 283.

²⁰⁸ *Inscr. Christ. vetis Romae VII*o *suppl.*

insignibus. Vol. I. Suppl. I, Rome, 1915.

²⁰⁹ *Notiz.* 1916, 52.

²¹⁰ *ib.* 1917, 145, 155.

²¹¹ *De tribus inscriptionibus orphicis quae in sepulchris Thurianis sunt inventae*, Amsterdam (Clamen), 1912.

²¹² A. Olfert, *Inschriften griechischer Orphiker*, Bonn (Marcus und Weber), 1915: 1 M.

²¹³ *C.R. Acad. Inscr.* 1917, 275 ff. Cf. *Rev. Etal.* xi. 280 f.

²¹⁴ *Pal. Egypt. Found. Q.S.* 1916, 142. See *Newen Bulletin Arch. Egypt.* 1915, I. 2 (Gardiner).

²¹⁵ *B.S.A.* xxi. 163 ff.

Roman inscriptions are discussed by L. Radermacher²⁸² and W. Bannier.²⁸³ The correction of a Pompeian *graffito*²⁸⁴ and the interpretation²⁸⁵ of certain terra-cotta loom-weights from Taras (Tarentum) need not detain us. Of greater importance is D. Comparetti's examination²⁸⁶ of the inscriptions on four bronze tablets of the fifth and fourth centuries B.C. from the Achaean cities of Crimisa, Caulonia, Petelia, and Terina in Southern Italy, all of them testamentary in character: the example from Terina had not been previously published, while that from Crimisa was known only in a very imperfect copy and restoration.²⁸⁷

The harvest from SICILY is also strikingly meagre. Messina has produced²⁸⁸ a number of epitaphs, *defixiones* and brick-stamps as well as two Greco-Oscan inscriptions of the Mamertine period: eight brief archaic texts come from Selinus and three from Motya.²⁸⁹ The remaining twenty-nine inscriptions—from Catania,²⁹⁰ Syracuse,²⁹¹ Centuripa²⁹² and Salemi²⁹³—do not call for detailed mention. The concluding instalment of the *S.G.D.I.* includes *addenda*, grammar and index to the Sicilian dialect inscriptions, edited by K. H. Meyer.

A bilingual Christian epitaph and a fragment of a Greek inscription have come to light at Carthage.²⁹⁴ Of the finds made in the Cyrenaica I cannot speak, as the publication in which they appear is not accessible to me.²⁹⁵ In EGYPT discoveries have been more plentiful and of greater interest, but for these I must content myself with a reference to my Bibliography which will be found in the sixth volume of the *Journal of Egyptian Archaeology*.

For the inscriptions of SYRIA and PALESTINE the periodical reports of F. Bleckmann, the latest²⁹⁶ of which deals with 1913/14, are full and valuable. A building record of 561/2 A.D. from a mosaic pavement at Shellal,²⁹⁷ near Gaza, a brief text from Khan Younas²⁹⁸ and a fragment of a document of the early Imperial period from Joppa,²⁹⁹ now in the Museum at Uddersålla (Sweden), should also be noted, as well as J. Offord's comments on two Palestinian inscriptions recently published.³⁰⁰ The island of Ruad, the ancient Aradus, has produced (in addition to a Rhodian amphora-handle, a vase inscription and four weights) eight Greek texts, of which the most interesting are a Greco-Phoenician bilingual dedication to Hermes

²⁸² *Wien. Stud.* xxxix. 70 ff.

²⁸³ *Berl. phil. Week.* xxviii. 981.

²⁸⁴ *Apex. Ep.* 1915, 33.

²⁸⁵ *Arch. Anz.* xxxi. 1184.

²⁸⁶ *Annuario*, ii. 219 ff.

²⁸⁷ A. Vogliano, *Atti Accad. Torino*, xlix. 1027 ff.

²⁸⁸ P. Ono, *Mon. Anz.* xxiv. 121 ff.

²⁸⁹ *Notizie*, 1917, 341 ff. Cf. for Motya, 1915, 438.

²⁹⁰ *Is.* 1915, 216 ff.; 1918, 60 ff.

²⁹¹ *Is.* 1915, 183, 203. Cf. *Berl. phil. Week.* xxviii. 980 f.

²⁹² *Notizie*, 1915, 270 f.

²⁹³ *Mon. Anz.* xxiv. 697 ff.

²⁹⁴ *C.R. Acad. Inscr.* 1916, 423 f.; 1918, 144.

²⁹⁵ *Notiziario Archeologico* I. fasc. 1, 2. Rome (Ministerio delle Culture), 1915. See *Rev. Arch.* ii. (1915), 462.

²⁹⁶ *Zeits. d. d. Palästina-Forsch.* xxxviii. 229 ff.

²⁹⁷ *Pal. Expl. Fund Q.S.* 1918, 145; M.S. Briggs, *Burlington Mag.* May, 1918; *Rev. Bibl.* xiv. 509 ff.; xv. 506.

²⁹⁸ *Rev. Bibl.* xiv. 572 f.

²⁹⁹ H. Atimé, *Revue*, xv. 208.

³⁰⁰ *Pal. Expl. Fund Q.S.* 1915, 198 ff. Cf. *Rev. Bibl.* xii. 270.

and Heracles, a mutilated epigram³⁰¹ and an honorary inscription on a statue-base of the well-known C. Antius A. Iulius Quadratus, governor of Syria in the early years of Trajan³⁰². Two further instalments of the collection of Greek and Latin inscriptions made in North Syria by the Princeton University Archaeological Expeditions have appeared and maintain to the full the high standard attained by this publication. One of these parts³⁰³ devoted to the Hauran Plain and Djebel Hauran, contains 185 inscriptions, mostly sepulchral and votive, of which 100 were not previously known: these include a dedication of *ἡ πατρις καὶ ἡ δεκαρία* for the safety of Gallienus (No. 636), a building inscription dated 45 A.D., the earliest text with an emperor's name which has come to light east of Anti-Lebanon (No. 655²), and a votive to *Θεῷ Θεοδότῳ* (No. 763). Three further inscriptions from the Hauran have been published by F. Bleckmann³⁰⁴. The remaining part of the Princeton collection³⁰⁵ contains sixteen Greek inscriptions of the interesting Greco-Nabatean site of Si (Socin), of which only three appear for the first time, including one (766) consisting of sixteen fragments of the edict of Agrippa, portions of which have been found at Kanawāt (Dittenb. *O.G.I.* 424). A. Harnack has discussed at some length³⁰⁶ 'the oldest Greek church-inscription,' discovered at Deir All, 22 km. S.E. of Damascus: it was inscribed over a *συναγωγή Μαρκεριωτίων*, a Semitic-Greek village church, in 318/9 A.D., in the brief period during which heretical churches might publicly declare themselves as such. Of the article by M. von Oppenheimer and F. Hiller von Gaertingen on 'the cave-inscription of Edessa with the letter of Jesus to Abgar' I know nothing save this title³⁰⁷.

Excavations on the Serai Point at CONSTANTINOPLE have unearthed a number of Byzantine stamped tiles³⁰⁸ and six late inscriptions³⁰⁹ of which the epitaphs of Photinus and *Ἀββᾶς Ἀρσένιος* and the building-record on the tower of Michael II and his son Theophilus are the most valuable.³¹⁰ Three Greek texts were discovered on the Gallipoli Peninsula during the military operations,—a dedication³¹¹ by the *δῆμος* of Eleus to Attalus II 'saviour and benefactor of the city,' and two epitaphs from Suvia Bay³¹² belonging to the second century of our era, one of which mentions the *πάρις τῶν Κοιλαρῶν*. V. Pârvan's survey³¹³ of archaeology in ROMANIA refers to various Greek inscriptions found at Ulmetam, Mangalia, Constanza and Histria: at Kam Orman, a *vicus* of the last-named, a new and interesting fragment of the 'Aristagoras Inscription' (Dittenb.

³⁰¹ *Bes. B.M.* viii, 576 ff.

³⁰² *Ib.* xiv, 208 ff.

³⁰³ *Princeton Univ. Arch. Expeditions to Syria*, Div. III., Section A, Part 5, Leyden (Brill).

³⁰⁴ *Zeits. d. d. Palästina-Forsch.*, xxxviii, 222 ff.

³⁰⁵ *Ib.*, III., Section A, Part B, Leyden (Brill).

³⁰⁸ *Siech. Besch.*, 1915, 746 ff.

³⁰⁹ *Ib.* 1914, 847 ff.

³¹⁰ *Arch. Anz.* xxxi, 17 ff.

³¹¹ *Ib.* 22 ff.

³¹² *Cl. Arch. Ep.* 1915, 34.

³¹³ *Class. Quart.* xi, 1 f.; *C.R. Acad. Inscr.*, 1917, 29 f.

³¹⁴ *B.S.A.* xxi, 166 ff.

³¹⁵ *Arch. Anz.* xxx, 230 ff.

*Syll.*³ 325) has come to light³¹⁴ and at Histria itself a second-century votive set up to the *Διόσκοποι Σωτήρες* by *οἱ στρατιῶται πεπλευκότες ἐπὶ βοήθειαν Ἀπολλωνιάταις*.³¹⁵ From the same town come four Greek texts, edited by K. E. Illing,³¹⁶ three of which were erected by the Council and People *τῆς λαμπροτάτης Ἰστρινιώτης πόλεως* in honour of Caracalla, Severus Alexander and Julia Domna respectively. G. Seure has continued his articles on the archaeology of THRACE,³¹⁷ discussing a number of unpublished or little known documents inclusive of eight inscriptions, one of which records a decree³¹⁸ passed by the Lacolaemonians in honour of M. Ulpius Genialis, a native of Trajana Augusta and honorary citizen of Sparta, for *ἡ περὶ παιδείας καὶ λόγους σπουδή*. G. Kazanow has been active in the preservation and publication of inscriptions recently discovered, many of them during the course of military operations at Kara Orman,³¹⁹ Malko Tirmova³²⁰ and various points on the Aegean coast from Aenus to Abdera.³²¹ F. Preisigke has discussed the Sceptoparene Inscription (Dittenb. *Syll.*² 418) in relation to the Imperial Chancery at Rome,³²² and M. Halleaux has proposed³²³ a new restoration of a difficult passage in the decree of Dionysopolis for Avornion (Dittenb. *Syll.*² 342). The interpretation of the Thracian inscription engraved in Greek letters upon a gold ring found at Ezetovo continues to exercise scholars, but the problem still remains unsolved.³²⁴

On G. P. Oikonomos' collection of inscriptions from MACEDONIA, which I judge to be a work of some importance, I am unable to report from first-hand knowledge.³²⁵ To the same editor is due a preliminary publication of various finds made at Salonica,³²⁶ while two epitaphs have been discovered³²⁷ by A. J. B. Waco at the site of Olynthus, and several points in the famous inscription of Lete (Dittenb. *Syll.*² 318) have received fresh treatment from O. Cuntz.³²⁸ A series of thirty-two texts from Beroea (Verria) has been published by A. K. Orlandos,³²⁹ of which one, a votive erected to Atargatis *Σώτειρα* by a priest, dates from the third century B.C., while the remainder belong to the Christian era: two interesting inscriptions of 230 and 261 A.D. take the form of dedications *τῇ θεῷ Συρίῳ Παρθένῳ*. Finally the lower part of an altar with a bilingual inscription has come to light at Poetorio (Pettau) in Styria.³³⁰

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³¹⁴ *ib.* 243 f.

³¹⁵ *ib.* 269 f.

³¹⁶ *Berl. phil. Week.* xxxvii 1634 ff.

³¹⁷ *Rev. Arch.* i. (1913), 71 ff.; ii. (1915), 195 ff.; iii. (1916), 339 ff.

³¹⁸ *ib.* ii. (1915), 204 ff.

³¹⁹ *Arch. Anz.* xxx. 186 ff.

³²⁰ *ib.* 87 ff.

³²¹ *Arch. Anz.* xxxiii. 1 ff.

³²² *Schriften d. wiss. Gesellschaft Strassburg.* xxx. 1 ff. *Cl. Rec. Arch.* ii. (1915), 172 f.

³²³ *Rev. Et. Anc.* xix. 232 ff.

³²⁴ *Rev. indo-grec-latino slov. ling. ant.* i.

209 ff.; *Indogerm. Forsch.* xxxvii. 269 ff.; *Illana*, vii. 86 ff.; *Bull. Soc. Arch. Belg.* iv. 50 ff., i. 232 ff.

³²⁵ *Επιγραφὴν τῆς Μακεδονίας τρέχει εἰς Ἀθήνας (Σκελετάρη)*; 4 dr. *Cl. Arch.* Ep. 1913, 23.

³²⁶ *Arch. Anz.* ii. xiv. 1913, 11. *Cl. Jahresh.* xvi. Beiblatt, 211 f.

³²⁷ *B.S.A.* xxi. 14.

³²⁸ *Hermes*, lvi. 102 ff.

³²⁹ *Arch. Anz.* ii. 144 ff.

³³⁰ *Jahresh.* xvii. Beiblatt. 110.

POSTSCRIPT TO PAPER ON DIADUMENUS HEAD.

SINCE finishing this paper I have observed a serious omission in it. I have not given any exact reproduction of the pattern on the headband produced by the inlaying of silver. This defect I now remedy. Mr. E. H. New has made for me a careful drawing from the original, in natural size.



The pattern is of a familiar type, the alternate lotus and bud: but it is a very interesting variety, to which I have not found any exact parallel. The form, indeed, is much more like a palmette than a lotus. The base from which the leaves spring is boat-shaped, not oblong, and there seems to be in the drawing some attempt at perspective. We know, in fact, that the principles of perspective were applied, not to landscape but to architecture, as early as the middle of the fifth century. On the central leaf of one palmette there are traces of a pattern.

The question arises whether the design is merely decorative, as on many Greek vases, or whether it has some meaning. Closely similar to the lotus or palmette of our design is that on the crown of Hera on the coins of Elis (*B.M. Cat. Peloponnesus*, Pl. XII.). The palmette also occurs on typical sculptured heads of Hera, such as the great Ludovisi head. It is noteworthy also that the thunderbolt on the coins of Elis often resembles in form two palmettes united at the stem. The coins bearing the name of Elis were closely connected with the Olympic games. Whether this line of connection is sufficient to relate our head to Olympia is doubtful; but for the head itself Olympia is a very probable source, remarkable bronzes having been washed up by the rivers on the site.

P. GARDNER.

NOTICES OF BOOKS.

L'Archéologie française en Asie Mineure et l'expansion allemande.

By F. SARTIAUX. Pp. 55. Paris: Rachotte, 1918. 2 fr.

This lecture delivered before the *Société de Géographie* gives an interesting historical sketch of archaeological activities in Asia Minor beginning with the days of Francis I., and of the decline of French enterprise during the last forty years, a period marked by ever increasing efforts on the part of Germany.

All the world knows that Germany prostituted her scientific missions to the service of her political schemes, and when he spoke (the lecture was delivered in February 1918) M. Sartiaux would not have been human if his strictures on the slackening efforts of French science had not been tinged with regret at lost political opportunities, which if seized might have spared France part at least of her agony.

In effect the brochure is a political pamphlet, and the author in urging a return to the policy which brought France archaeological renown in the past is, very pardonably, not perhaps wholly swayed by zeal for the interests of archaeology or for the scientific reputation of his country, and he may be suspected of losing sight of the international character of science and art.

A short account is added of excavations undertaken by the author in Phocæa in 1913, 1914, the study of which place as the mother city of Marseilles is regarded as the special right of Frenchmen, and indeed as a pious duty; and the work concludes with a description of the pillage of the town by the Turks on the 12th June 1914.

Myths of Crete and Pre-Hellenic Europe. By DONALD A. MACKENZIE.

Pp. 361, with 37 Plates (4 in colour). London: Gresham Publishing Co., 1917.

This book contains a good popular account of the discoveries in Crete and the borders of the Aegean, and of the probable relations of Crete with her neighbours. The title would seem to be a misnomer, but the cult of the 'Great Goddess' in Crete leads the writer, quoting parallels from many lands, to adumbrate a theory of ethnic relationship based on a common worship.

The lavish use of the word 'probably' has permitted the construction of various speculative edifices which it may be suspected might be undermined by a close examination of their foundations, and this suspicion is strengthened by a certain lack of discrimination shown in the choice of the authorities quoted, who would appear to differ much in weight.

It seems, then, likely that the chief value of this book will be for the layman as an introduction to the study of the many subjects touched upon in its pages.

The book is well illustrated, but the four coloured plates by Mr. John Dumeau, A.R.A., whose inspiration is drawn from the Minoan frescoes, are too well in keeping with the author's design.

Sikyoniske Vaser: en arkæologisk Undersøgelse. By K. FRIS JOHANSEN.

Pp. 171, 21 plates. Copenhagen: V. Pios Boghandel, 1918.

The vases which Johansen calls Sicyonian are, broadly speaking, those which have commonly been styled proto-Corinthian, rather for the sake of convenience than from

any general conviction that they were manufactured at Corinth. Their real origin is disputed: they have been attributed to Corinth, to Argos, to Boeotia, to Chalcis and even to Ionia. Leeschke suggested that they were Sicyonian, and Johansen, after a careful study of them, comes to the same conclusion.

On grounds of technique, shape, and in some measure provenience, Johansen is led to believe that the so-called 'Delphian geometric' pottery, some specimens of which Fortwangler had already connected with 'proto-Corinthian,' is the Sicyonian ware of the geometric period. In 'proto-Corinthian' ware proper he discriminates three periods, which he names, after characteristic shapes, the periods of the broad, the pointed, the tall aryballos: and within these periods he makes a further classification according to shape and style. For the purpose of his study he has visited most of the museums in Greece and in Italy and has sought out and examined the relevant objects with the greatest diligence: in particular he has investigated a number of unpublished finds, and from these, together with the ample material already published, he has been able to draw important conclusions as to the sequence and comparative chronology of his vases.

The broad aryballos, and the vases which go with them, belong to the late geometric period and are contemporary with the early proto-Attic vases: the next geometric elements are derived from Cyprus, partly by way of Crete. This period is succeeded by that of the pointed aryballos, in which Sicyonian vase-painting culminates: the simple geometric patterns and uniform rows of animals give way to heterogeneous rows of animals and scenes from life and myth; the black-figure technique appears with its mosaic and added red and white; masterpieces are produced like the Mammillan lekythos in the British Museum and the Chigi vase in the Villa Giulia. Contemporary with these archaic vases is a group of 'anti-geometric' vases, usually of less loving workmanship, which continue the style of the first period, that of the broad aryballos. The third period is that of the tall aryballos: Sicyonian vases now show Corinthian influence and are found side by side with vases of pronounced Corinthian type.

Imitations of Sicyonian vases were made in various localities, especially at Cumae.

The arguments, negative and positive, for the Sicyonian origin of the ware are very persuasively stated by Johansen. The inscriptional evidence is unfortunately scanty. Now light may be expected one day from Sicyon: but the place has not been excavated.

The last chapter of the book deals with the chronology of Sicyonian pottery. The author compares the yield of Sicyonian vases by Syracuse, Megara and Gela with the dates given by the ancients for the foundation of these cities. A certain number of Syracusan graves belong to the period of the broad aryballos: only a few specimens have been found at Megara: the oldest Sicyonian vases found at Gela belong to the transition from the broad to the pointed type. The stylistic argument would therefore place the three cities in the following order: Syracuse the oldest, then Megara, Gela last: which is the traditional order. This encourages the author to accept the tradition for the absolute as well as for the comparative chronology of these cities: so far, at any rate, as to date the foundation of the three to the later part of the eighth century. The period of the pointed aryballos will thus be the first half of the seventh century, a date confirmable by the evidence from Egyptian scarabs, by the absence of Sicyonian ware at Naucratis, and by the prevalence of the curling known as 'layer hair,' which on other grounds is considered characteristic of the seventh century. Approximate dates for the first and third period may be obtained by working backward and forward from the date assignable to the second.

The above is but a summary of an important book which maintains the high standard of Danish archaeological work. It may be added that the book is well printed and well illustrated, and contains many observations on the history of shapes and ornamentation which will be of interest to scholars working in similar fields.

ΙΣΤΟΡΙΑ ΤΗΣ ΕΣΑΗΝΙΚΗΣ ΔΗΜΟΣΙΑΣ ΟΙΚΟΝΟΜΙΑΣ. By A. M. ANDREAEDES. Pp. xii + 624. Athens: Raptanidis, 1918.

This work forms part of a systematic survey of public finance, with special reference to the finance of modern Greece. In spite of its title, it does not cover the whole ground of ancient Greek statecraft, but merely deals with a few special topics such as the public economy of Athens and of the Byzantine Empire. The finances of the great temples, of the federal states and of the post-Alexandrine monarchies receive no consideration, although the author promises to discuss them in a future treatise of wider compass. So far as it goes, the present book answers its purpose well. Though somewhat lacking in detail about the administrative methods of the states passed under review, it offers a full and clear conspectus of their revenues and outlay. Except in the section on Byzantine finance, where he breaks new ground, the author makes hardly any fresh contribution to the knowledge of his subject, but he makes judicious use of the results of recent research, and he employs his wide knowledge of general economic history to good effect. Prof. Andreades should be capable of producing a standard work on Greek finance; but his present book is not likely to displace any of the existing manuals.

The Seleucid Mint of Antioch. By EDWARD T. NEWELL. Pp. 151, with 13 plates and 23 cuts in the text. New York: The American Numismatic Society, 1918. Five dollars.

Mr. Newell's most promising attack on the complicated series of problems presented by the coins bearing the name and types of Alexander the Great has been grievously interrupted by the ecstasium which has placed so many important collections out of bounds for American, no less than for British, scholars. He has turned part of the interval to excellent account by making an excursion into the neighbouring realm over which the Seleucidae preside. His investigation has, of course, been hampered by the lack of casts and other reliable information: one cannot be certain that 'pivotal' specimens may not be lying unrecognised in the trays of, say, the great cabinets at Berlin and Vienna. This handicap notwithstanding, he is to be congratulated on having achieved a notable advance.

Long ago I ventured to suggest in the pages of the *Journal* that the intensive study of small groups of specimens, presumably the products of particular mints, offered the best hope of progress towards a properly ordered and final arrangement of the money of the Seleucid Kings. Mr. Newell has bettered this advice. Greatly daring, he has ventured to tackle the output of what we must suppose to have been the most prolific mint of all; and has endeavoured to catalogue the royal gold and silver issued at Antioch from the reign of Seleucus II. down to the end of the dynasty. It is, of course, regrettable that the earlier kings are omitted. But the questions relating to these are so difficult that it would have been idle to approach them without the assistance of hundreds of casts which at the moment it is impossible to procure, and we must perforce acquiesce in the relatively late beginning. Future workers will find it a great advantage to have the Antiochene issues segregated, even from the middle of the third century B.C. onwards. And Mr. Newell's main conclusions are likely to be accepted by students generally. I for one, am not disposed to quarrel with almost any of them, least of all with his uncompromising rejection of the old theory that the monograms usually conceal the names of mints. The points of interest are so numerous, and so varied, as to preclude any attempt to enter into detail. But it is perhaps permissible to mention that the well-known tetradrachms of 'Antiochus, son of Seleucus III.' are assigned to the childhood of Antiochus V. (Eupator), an attribution originally proposed in the *J.H.S.* for 1903. In his discussion of the coins of Antiochus VI., by the way, Mr. Newell does not mention the tetradrachms of 142 B.C. struck from a die on which the name ΣΤΑ has been deliberately erased. Has he overlooked Regling's paper in *Zeitschr. für Numismatik*, xxiv.?

GEORGE MACDONALD.

ΑΠΟΝ-ἡ Μουσική τῆς Ἑλλάδος ὡς ἀναπτύχθη ἀπὸ τῶν ἀρχαιοτάτων χρόνων μέχρι τῆς σήμερας
 ἐκδ. Α. Παπαρθεμίου καὶ Π. Δ. Ζαχαρία. Αἰ. Πρ. xxxvi+63. Αἰθῶναι: Τύποις Ἑρμού.
 Ζαχαροπούλου, 1917. 12 drachmas.

The authors' declared aim is to dissipate the errors of certain Western musicians about Greek music, and to establish this branch of the art in the position that it deserves. New Greek music may include the ancient Greek theory and surviving fragments, Byzantine church music, and finally modern Greek music, both ecclesiastical and popular. Something is said upon all these in this book, and specimens are given in European notation with a pianoforte accompaniment. For Western readers the main concern will be with the folksongs; and here we cordially welcome the effort made by the authors to stimulate the enthusiasm of their countrymen for their national music. We fully agree with the suggestion that Greek folksongs should form the basis of musical instruction in Greek schools. Many of these songs are of great beauty, and bear strongly-marked features of rhythm and tonality. The idea, however, that such traits are directly inherited from ancient Greece must be excused as a patriotic exaggeration. We feel sure that the native melodies of Hellas can stand on their own merits. In dealing with ancient music the authors keep to the orthodox lines. The examples are from Riemann and von Kralik, whose interpretations are adopted. Only one mediæval hymn is printed; and, as the reference to the MS. (Athens National Library) is omitted, it is impossible to check the correctness of the rendering. There are six modern ecclesiastical specimens. The authors do not say whether they are entirely in favour of part-singing in the Greek Church. The first hymn (ὕμν. Δαυὶδ) is meant for treble and alto in thirds throughout (not a satisfactory arrangement); but the *Kyrie eleison* (p. 14) is for unison singing. On the whole such a compromise is unlikely to succeed; hymns conceived by men who never dreamed of harmonization are far better sung as intended, i.e., in one moving part over a drone. The attempt of the authors to evolve laws of harmony for the various modes (as was done by S. G. Hatherly in his *Treatise on Byzantine Music*) is theoretically ingenious and might be useful to composers working in Greek music; some inspiration for larger works. The theoretical portion of the book also deals with acoustics and the laws of harmony. The student of Modern Greek will be interested to see how easily that language renders the technical terms—a contrast to Russian, which has imported them wholesale from the West. The mediæval mode-system is briefly discussed; but that of Chrysanthos (printed 1832) receives fuller treatment. The authors condemn the latter for perpetuating confusions in tonality. Mode and rhythm are also dealt with. We note that 5-time and 7-time occur in the folksongs (another supposed legacy from ancient Greece). In Church music the authors incline to a measured tempo, contrary to tradition.

Forty-six folk-melodies form the chief attraction of the volume. (Seven of these are from Bourgaux-Decondray, *Mélodies populaires de Grèce et d'Orient*.) The piano accompaniments (which are as a rule unsuccessful) will be justified if they encourage performance of the songs. The modal character of all the airs is carefully preserved.

The music and text are clearly and accurately printed. The introduction, written in the higher literary style, is generally lucid and free from pomposity. There is a full table of contents, but no index.

H. J. W. T.

War at Sea: Modern Theory and Ancient Practice. By Admiral Sir
 BERNARD CROFTON, G.C.B., K.C.M.G., C.V.O., D.C.L. Pp. ix+113; eleven
 Plans and a Map. Edinburgh and London: Blackwood, 1919.

Will anyone, we wonder, ever write a real history of naval warfare in the last five centuries a.c.? The writer would have to be something more than abreast of modern critical research, and at the same time be well versed in both the theory and the practice of modern naval war; and he must never forget that his subject was real ships on a real

ess, and not a classical tradition. It seems unlikely that such a combination of qualities will occur. The little book before us, in spite of its wide title, does not pretend to be such a history. It takes the naval actions of two wars, the Persian and Peloponnesian, and applies them to illustrate the general theory of waging war—a scheme which demands that you first thoroughly understand what those naval actions were. The two sections into which the book falls are of very unequal merit: would it be unfair to say that this reflects the difference between Herodotus and Thucydides? In the larger section, dealing with the Peloponnesian war, numbers are carefully collated, and the naval operations are well done. Most of them were also well done by Thucydides, himself a naval commander; but even those who know this war intimately will gain from Admiral Custance's treatment of the sea story as a connected whole. Especially clear and good is the manner in which the two trade routes, Sicily—Gulf of Corinth and Black Sea—Dardanelles, are shown to condition the war at sea. In tactics, just emphasis is laid on the deepening of the Athenian wings at Arginusæ,—a novelty which paved the way for Epaminondas and Demetrias. The author, however, when considering Phormio's innovation, soon abandoned, of using line ahead instead of line abreast, might well have warned the reader that this does not mean what line ahead means in modern warfare. For, as artillery was unknown, line ahead for Greek galleys was only a manoeuvring and not a fighting formation: they always had to turn into line abreast to fight. And it was not a 'new system': on the author's own showing, the Persians entered Salamis Bay in column of line ahead. We know now from Eoelus that the Phœnicians 'invented' the discipline, both that and line ahead may be infinitely old.

The shorter section, on the Persian war, is much inferior to the other: it is too brief, and, though the author has consulted Dr. Macan, he conveys no clear idea of either of the big battles. This is because (so far as appears) he has not really thought out his Herodotus. As an instance, he believes Herodotus' naval numbers to be 'not impossible.' It follows that he ought, as a practical seaman, to tell us exactly how, without wireless, you took 1,200 warships about and anchored them, or manoeuvred a line which he thinks might in certain circumstances have been 16 miles long. It may be simplicity itself; but here was a chance for an expert to explain it to the wondering layman. At Artemisium he draws the Greek fleet up across the mouth of the Ores Channel, with either flank resting on the land, and then makes the Persians (3rd day) 'seek to encircle' them. At Salamis, where he makes the Persians enter (as everyone now does) in column of line ahead, he first suggests that they were caught 'at a disadvantage' by the Greeks while changing to line abreast, and later says, 'It is not to be doubted that the Persians made a frontal attack'; while the plan shows two Persian columns, of which the eastern, nine abreast, is meeting, bows on, the Greeks, who are in column of 15 abreast. Frankly, the account conveys little meaning to the present reviewer. And the conclusion, that the battle illustrates 'the advantage to be derived from a skilful use of the land by the inferior fleet,' is no conclusion at all unless we are quite sure (and in 1919 we are not) that the Greek fleet in Salamis Bay on the day was decidedly inferior. What it does illustrate is how use of the land enabled the slow ship and the spear to beat the fast ship and the bow.

The author, however, has an interesting theory as to why the Persians ever fought Salamis at all, which is, of course, the real point: the position of the Greek fleet flanked their further advance, and, had they not fought, their sea communications, vital to their land army, would have been endangered. But it is not certain that the army depended on seaborne food, or rather on food yet to arrive by sea; Marathon did very well without it. (Consider the Bulgarian anti-transport of 1912.) And anyhow the first (abandoned) Persian plan—to manoeuvre the Greeks out of the narrows by sending one squadron to the Argolis—would apparently have met the case. But the author is much interested in the flanking position as being the true foundation of all naval strategy, a theme which he illustrates excellently from the Athenian fleet at Sapes in the latter part of the Peloponnesian war, and from Hermocrates' advice to the Syracusans: (it is strange that he does not adopt Dr. Macan's view about Artemisium, that the Greeks took

position to flank a Persian advance down the Orea Channel) : and perhaps the reason of his 'Salamis theory' is to be found in a little sentence on p. 100 : he is one of those who think that the Grand Fleet might have been in the Forth to flank a German advance southward.

The battle-plans, or rather charts, are mostly excellent. There is a slip on the Sybota plan, where '20 Athenians' should be '10' ; perhaps it arose from the 20 Athenians who came up after the battle. The author introduces a delightful word which is new to the present reviewer : a fleet of aeroplanes is called an *aery*.

Greek Political Theory : Plato and his Predecessors. By ERNEST BARKER. Pp. xiii+403. London : Methuen and Co., 1918.

Some twelve years ago Mr. Barker produced a valuable book on the political thought of Plato and Aristotle. He now gives us under the above title the first volume of a new work based on his earlier book, but containing much new material and planned on a considerably larger scale. Thus 207 pages dealing with Plato and his predecessors in the original work have been expanded into 392, with eight lines more on each page. He has added a new and most interesting chapter on the political, economic and educational characteristics of the Greek States, and on the parts which slavery and representative institutions played in them. It is useful for the student of Plato and Aristotle to be reminded that the low view which they held of labour was not shared by the Athenian public and was 'the opposite of Pericles' conception that an adequate knowledge of politics can be combined with attention to private business.' Mr. Barker has much enlarged his section on the Sophists, at the end of which he prints a translation of the recently discovered fragment of the Sophist Antiphon 'on Truth,' which shows how 'a naturalistic view of the universe led to a naturalistic system of ethics and politics.' Antiphon was sufficiently broad-minded to hold that 'our natural endowment is the same for all of us, whether we be Greeks or barbarians,' and he thus sees the antithesis of *physis* and *nómos* not merely for the familiar purpose of discrediting established law, but also with the more commendable object of proving the fundamental equality of mankind. Stress is rightly laid by Mr. Barker on the point that the 'Might is Right' philosophy owes much to the political fact of the Athenian Empire.

Mr. Barker devotes much attention to the earlier Platonic dialogues, as adumbrating the fully developed doctrine of the *Republic*, lucidly summarises the relation of that work to the 'swelling of opinion which characterised the end of the fifth century at Athens,' and shows in detail how Plato's own political experiences modified his political theory. He gives a general assent to Professor Burnet's view of the relation between Plato and Socrates, while refusing to believe that the doctrine of Ideas, communism and the rule of the philosopher-king are Socratic. We are inclined to think that his account of the *Republic* is somewhat unduly expanded. Anxious that we should miss nothing, he paraphrases Plato at great length and is prone to dwell on the important points with perhaps unnecessary iteration. Most welcome, however, is his criticism of Plato in the light of modern political theory (he is a faithful disciple of T. H. Green), as well as of the most recent political movements : for, as he says in allusion to the war, 'it is impossible not to feel that a new feeling for an old message came from the circumstances and environment of the times.' Militarism, navalism, international relations, national education, socialism, the right to live, are discussed with the sanity and lucidity which we expect from Mr. Barker. The study of philosophy would be shorn of most of its terrors if all its exponents possessed Mr. Barker's clarity of style.

Chapter xii. contains a full analysis of the *Politeia*, a dialogue at the end of which Plato, forsaking the absolutism of the *Republic*, 'makes his peace with reality and acknowledges that there is room in political life for consent and law and constitutionalism and all the slow unscientific ways of the world of men.' Here again we think Mr. Barker

is a little long, but the chapter is brightened by allusions to the Stuart theory of prerogative, the German theory of monarchy, and positivism. The next 100 pages are devoted to the *Leves*, 'the most neglected and in many ways the most wonderful—and the most modern (or medieval)—of all the writings of Plato.' Realising that the wisdom of a philosopher-king can never in this imperfect world take the place of law, Plato undertook a sort of codification of contemporary laws, which largely influenced Hellenistic and, later, Roman law. In this dialogue, too, he invented the grammar school, as in the *Republic* he invented the university. These two points, made by Professor Burnet in his *Greek Philosophy*, supply texts for much that Mr. Barker has to tell us about the *Leves*. In the *Leves* education means education in the general art of citizenship and in the spirit of the laws.—Plato's preambles will provide a convenient lesson-book. So important is education that the Minister of Education is to be the chief magistrate of the State. The teachers, however, are to be resident aliens and are to be paid! Elementary teaching is no work for a citizen of Athens; and pay would lower him. Pupils are to attend the same school for all subjects, and each school forms an 'officers' training corps,' says Mr. Barker, where military drill is taught under the guise of physical training. We think that most readers will find the chapters on the *Leves* the most interesting part of the book.

Mr. Barker concludes with a note on Aristotle's very considerable debt to the *Leves* and a useful appendix on the later history of Plato's political theory. 'The end of the *Leves* is the beginning of the Middle Ages'—a saying justified by the religious doctrine and persecution of the last book, where we read of the Nocturnal Council conversing with heretics in the House of Reformation for the salvation of their souls. But says Mr. Barker, the analogies are spontaneous. It is curious, and somewhat sad, to find that the way of faith and the way of reason, at least of the later Platonic variety, lead to the same result. Elderly metaphysicians tend to resemble youthful theologians in thinking that no view of the world but their own can possibly be right or even decent. Philosophy is obviously not for Little-Faiths.

We hope that Mr. Barker will not be long in giving us his second volume on *Aristotle and his Successors*. Such a book is badly wanted. J. H. S.

The Neo-Platonists. By THOMAS WHITTAKER. Second edition, with a Supplement on the Commentaries of Proclus. Pp. xvi+318. Cambridge University Press, 1918.

During the last few years Neo-Platonism has been receiving in Great Britain some of the attention to which its intrinsic greatness and historical importance entitle it. The revival of interest in the subject is due in no small measure to Mr. Whittaker, whose treatise, *The Neo-Platonists*, published in 1901, still remains the best account of the school in English. Mr. Whittaker now gives us a second edition of his book, adding an appendix of 84 pages on the Commentaries of Proclus. Apart from this supplement, the only alteration of importance is in his account of Gnosticism, which Reitzenstein has shown not to be primarily a philosophical development of Christianity, as Mr. Whittaker maintained in his first edition, but to have its roots much further back in the religions of Persia, Chaldea and Egypt.

With the bulk of the book, which appears almost in its original form, it is hardly necessary to deal here. The supplement, however, deserves notice as a new and important contribution to the history of philosophy. The Neo-Platonic School was founded by Plotinus at Rome about 244 A.D. After the death of Iamblichus, about 320, it diffused itself through the Empire, and at the beginning of the fifth century found a home in the Academy at Athens. Mr. Whittaker's purpose in adding his appendix on Proclus' Commentaries is to give a more detailed account of this Athenian period of Neo-Platonism, of which Proclus, head of the Academy in the second half of the fifth

century, was the chief representative. Proclus is so interesting that we may fairly wish that Mr. Whittaker had treated him systematically in a separate volume, a plan which, as he tells us, once occurred to him. The great merit of Proclus is not that he is a thoroughgoing systematiser—nowadays over-much system is happily at a discount—but that he is full of acute criticisms of his predecessors, and foreshadows a number of important modern doctrines. He makes the point, so obvious to present-day readers, that Plato would have been expelled from his own Republic as a dramatic artist and a jester. In his Commentary on the *Parmenides* he asserts that 'what Zeno denied was that a plurality absolutely dispersed and without any unity that it participates in can be real at all.' Whether this was Zeno's meaning or not, the interpretation is certainly acute. Proclus indeed sometimes warns us that he is bringing out the implications of a doctrine, without guaranteeing that those implications were present to the mind of its author. He has much sensible criticism of the doctrine of epicycles, which, he says, may be useful enough for calculation, but do not represent the reality. The simplest thing is to suppose that 'the planets . . . move according to types of motion intermediate between the circular and the rectilinear.' To explain the planetary motions he has recourse to 'clinging impulses from the planetary souls,' but it is no small advance to have attained an approximately correct descriptive formula.

Proclus defines experience as a kind of preliminary knowledge, affirming only a 'that' and providing the material on which judgment operates and which reason turns into an object of knowledge and verifies by processes which make evident the inward energy of the judgment. This strongly suggests Kant, and there is an equally strong suggestion of Kant in the statement that every mental act points to 'some one indivisible thing in us that knows all our energies, *ἡ ἐνέργεια δέσμιος ἐν ἡμῶν τοῦ νοῦς*'. In spite of holding the characteristic Neo-Platonic doctrine of mystical illumination, or rather *noesis*, reached by the negation of all possible predicates, he distinctly formulates the doctrine, says Mr. Whittaker, that the ultimate test of truth 'is ultimately coherence in a total system of knowledge.' Again Mr. Whittaker suggests that Proclus is anticipating the principle of 'organic values' when he argues that 'the combination of the worse and the better makes the whole one and perfect, though when they are not organically united, the mixture of the worse destroys the power of the better.' Proclus' treatment of Time is particularly interesting. It is, he holds, more real than the things in Time, and all progress implies it; it is not merely an attribute of consciousness, external things also participate in it.

The weak point of Proclus, as of Porphyry and the successors of Plotinus generally, is their uncontrollable passion for allegorizing. But Proclus is quite aware of his own weakness, does not expect always to convince, and excuses his interpretations as useful mental exercises. His voluminous treatises are written in a clear and attractive style. They are interesting, not merely as the dying utterances of free Hellenic thought, but as heralding a thousand years before their time some of the profoundest themes of modern philosophical speculation.

J. H. S.

English Translations from the Greek: a Bibliographical Survey. By FIKLEY MELVILLE KENNEDY Foster, Ph.D. Pp. xxix + 146. New York: Columbia University Press, 1918.

This is a list of translations published in England and America from Oaxton's 1484 *Aesop* (or *Plautus*) down to the year 1917, drawn up under authors and including Greek literature up to 200 A.D. with the exception of Josephus and the Christian Fathers. The sources drawn upon are, for English translations, Miss Henrietta Palmer's list up to 1640 in vol. xi. of the *Transactions of the Bibliographical Society*, the *General Catalogue of the British Museum Library*, the *English Catalogue*, Watt, Lowndes and the like; for American translations, Evans's *American Bibliography*, the *American Catalogue*, the *Publisher's Weekly*, etc. A list of translators, with references, constitutes the index.

The list under each author is strictly chronological and makes no attempt to group together the various translations of each separate work, nor does the book set out to be anything more than a simple compilation from the standard works of reference. On this plane the only criticism to be urged against it is that it might have been better to set out reprints in their proper chronological places rather than in a note subjoined to the entry of the original edition, at any rate in the case of translations up to 1800. The entire number of separate translations for the whole period works out at 1,289, which when reinforced by their 575 reprints gives a grand total of 2,164 editions. Of these, however, no less than 1,181 were issued during the nineteenth century. An interesting chart illustrates the development of translation by decades. A small but steady growth up to 1640 is brought suddenly down after that date by the adverse conditions of the Civil War. From 1650 the curve rises once more to 1720, the year of the completion of Pope's *Hom.*, and then another decline sets in, lasting twenty years. From 1740 to 1789 there is another fairly steady rise, then a decline to 1800, ascribed by Professor Foster to the exhaustion of the neo-classic impulse, after which we get a rapid increase from 28 new translations in 1801-10 to 55 in 1821-30, and 59 in 1841-50. From about 1800 the stream, swelled by Bohn's Classical Library and a multitude of "critica," rises to a torrent, the number of editions leaping up from 120 in 1861-70 to 240 in each of the last two decades of the century. A table showing statistics of the translations according to subjects for each half-century after 1800 affords evidence of the changing tastes of successive generations. Up to 1800 philosophy is an easy first, though history, fable and epic manage to divide the honours with it between 1800 and 1850, whereas drama makes little show; the first translation of Aeschylus in the list is actually as late as 1777, and Sophocles, Euripides and Aristophanes fare scarcely better. But with the start of the nineteenth century the supremacy of drama soon becomes overwhelming, although it was apparently being once more seriously challenged by philosophy from 1800 onwards.

The Dream in Homer and Greek Tragedy. By WILLIAM STUART MESSER, Ph.D. Pp. viii + 105. New York: Columbia University Press, 1918.

In this book Dr. Messer, whose hobby is the study of the dream "in all its aspects, literary and non-literary," subjects to a detailed analysis every passage in the Homeric poems and the three tragedies dealing with dreams, or dreaming. Dr. Messer is widely read in all branches of his subject, and his examination convinces much that is interesting. The instances in which a dream plays an important part are comparatively few, and the only one which can be said really to dominate the artistic economy of the poem containing it is that of Atossa in the *Perseis*; nevertheless, it is very pleasant to follow Dr. Messer in tracing the successive elaborations and refinements which the dream-device underwent after Homer had made a beginning with the gilded dream sent by Zeus to Agamemnon (*Iliad* ii. 1, ff.). That dream, as Dr. Messer points out, outrages at all points the canons of dreaming laid down by Professor Freud, inasmuch as it is entirely "objective and personal . . . conceived and portrayed as an external entity, with power of moving, thinking and speaking, like to any herald sent by the gods, a genuine dream-demon." By the time of Euripides, literary dreaming had become a much more elaborate and scientific affair. The *Odessa* seen by Iphigenia (*Iph. Taur.* 42 ff.) is not only susceptible of subdivision into four episodes at the hands of Dr. Messer but falls in quite remarkably with the Freudian theory that dreams always represent the fulfilment of a wish, and that the wish is generally an infantile one. It is Aeschylus, however, and not Euripides, whose dreams are the most poetically impressive of all, while Sophocles, if the extant plays are a safe criterion, employed the dream-device but sparingly.

Love, Worship and Death. Some Renderings from the Greek Anthology.

By SIR REXWELL ROOS. A new and enlarged edition. Pp. xi + 120. London: Edward Arnold, 1919.

This book, which first appeared in 1916, is now divided in two parts, the first containing a general selection of epigrams, the second devoted to translations from Sappho, Erinna and other women poets. Some of the versions are quite neatly turned, but as a whole they lack distinction and force.

The Greek Theater and its Drama. By ROY C. FLICKINGER. Pp. xxviii + 328. Chicago: The University of Chicago Press, 1918. 3 dollars net.

Mr. Flickinger hopes for a great revival of popular interest in the drama on the return of peace. But he solemnly warns us that such an interest 'has little to recommend it' if it is manifested 'by attempts at playwriting on the part of those without training, experience, or natural aptitude.' He does not explain how natural aptitude may be tested without writing. 'On the other hand,' he tells us, 'nothing can be more wholesome than a widespread knowledge of the origin, history, and basic principles of tragedy and comedy.' He is, in fact, somewhat deficient in humour. Indeed, at the head of a quite competent chapter on theatrical records, he has thought fit to inscribe the words 'Footprints on the sands of time.—Longfellow.' He apologises with laboured complacency for his temerity in differing from a certain Mr. Spingarn, whose æsthetic theory forbids a critic to concern himself with the influence of material theatrical conditions on a play. He bowdlerises the very vases which he reproduces for the purpose of introducing us on the appearance of Greek comic actors (pp. 46-47, notes). He is capable of adducing Mr. Sutro as a parallel to the Greek tragedians; nor does he seem to realise that Mr. Sutro's habit of arranging all the exits and the entrances before he begins to write his dialogue, is part of Mr. Sutro's tendency to write machine-made, wooden plays.

Yet the discerning reader will pass over these abscondities with an indulgent smile, and will find in this same book much solid learning and many just observations. After a discourse on the origin of tragedy and comedy (pp. 1-56), and an account, adorned with excellent illustrations, of the structural history of the ancient theatre (pp. 57-117), the author deals at length with the influence on Greek drama of what he calls 'environment in the broadest sense of the term.' He sets out to show how the technique of the drama was affected by its religious origin, its choral origin, actors, festival arrangements, and 'physical conditions,' e.g., the size and structure of the theatre. Under this last heading he discusses the so-called 'mimes.' There is a chapter, far too slight, on the influence of national customs and ideas, a chapter on theatrical machinery and conventions, and finally the very useful essay on theatrical records.

Mr. Flickinger regards tragedy and the satyric drama as independent developments of the Telephoniæan dithyramb. Tragedy, he thinks, came to Athens by Icaria, from Corinth, where Arion composed the first 'drama,' and from Sicily, where the name 'tragic' was first used. Satyric drama was imported later by Pratinas from Phlius. Our author sticks closely to the ancient literary tradition; and this we hold to be a merit. It is of great advantage for the student to have a clear exposition of the *basileia*, and a sober estimate of their content. But the result is negative. After all his argument, Mr. Flickinger is found asserting us that 'the general effect' of *Bacchylides' Thebes* 'must have been much the same' as that of a performance of Arion. The truth is, we do not know what Arion's performances were like. Mr. Flickinger does less than justice to theories based on ritual, especially on the cult of the dead. Whatever may have been the nature of Arion's dithyramb, it is certain that *Æschylus* derived both matter and technique from the cult of heroes, so that anyone who is investigating the origin—or, as

we prefer to say, the origins—of his tragic art must take that cult into account. Complicated products of the human mind, like tragedy, have twenty thousand origins, not one.

The section on the structure of the ancient theatre will be welcomed even by those who cannot share Mr. Flickinger's enthusiasm for Dörpfeld. One of the best things in the book is the account (pp. 88 ff.) of the scenic arrangements of the *Frogs*. Here Mr. Flickinger uses imagination on a set of well ascertained facts, and the result is illuminating. In view of this excellent reconstruction, and of the author's sensible remarks on the pursuit of Orestes by the Eumenides (p. 247), we are surprised that he should repeat the old unimaginative talk (p. 66) about a scene-building 'capable of being easily rebuilt or remodelled to meet the scenic requirements of each drama.'

In dealing with the influence of choral origin the author is too much occupied with the notion that the chorus was a nuisance which the dramatist had to subdue by various devices to the purpose of his art. He would have produced more illuminating results if he had started by considering the aims and methods of choral lyric in its non-dramatic stage, and gone on to analyse the effects for which the dramatists actually use their chorus, rather than the devices by which they circumvented difficulties. A study of Pindar's technique would perhaps have shown him that Sophocles has not been guilty of irrelevance in *Antigone* 1115 ff. . . . Compare this ode with the preceding ode (944 ff.), and you will discover the lyrical connexion between Semele, Antigone and Danae, and between Creon and Lycurgus. Look at *O.T.* 509 ff., and you will understand that Dionysus is appropriately invoked as a Theban god to banish pestilence. In both plays there is significance in the connexion between Dionysus and Apollo of Delphi. In both, the dramatic sequel is ruin instead of salvation. Similarly, a student of lyrical technique will see dramatic relevance in the description of Perseus with the Gorgon's head, romantic type of Orestes, in Eur. *N.* 434, where Mr. Flickinger sees nothing but a failure of Euripides. Even Demeter's search for her daughter in the *Helen* (1301) is relevant by Greek standards. At the outset Helen invoked Persephone (175), and Helen herself was snatched away when she was gathering flowers (242). But Mr. Flickinger is not the only critic who ignores these exquisite details and talks of the Demeter ode as 'so irrelevant that many have thought it an interpolation.' Similar criticisms are suggested by Mr. Flickinger's treatment of other topics. Much is said, for instance, of the limitations imposed by the small number of actors. What is more important is the effect that the dramatists in fact produced. There is a hint of what we want in the remark that the third actor made it possible to show 'the varied emotions which one actor's statements or conduct produce in the two others.' But it is only a hint, and is not developed.

We hope Mr. Flickinger will accept our criticism as evidence of the interest with which we have read his book. We have criticised it because we hope that it is not his last or his best work.

J. T. S.

A Handbook of Attic Red-Figured Vases, Signed by or Attributed to the Various Masters of the Sixth and Fifth Century, B.C. Vol. 1.
By JOSEPH CLARK HOPPIN. Cambridge: Harvard University Press, 1919.

In publishing this book Dr. Hopkin has rendered a great service to the study of vase-painting. The book is a record of both fact and opinion, for besides a list of the vases connected by signature and style with each painter and potter, it contains a very complete set of references; moreover, every signed vase is illustrated except where an illustration proved unobtainable. As Klein's *Maltesequaturen* and Nissen's similar publication in *Revue Archéologique*, 1916, were occupied only with cataloguing vases by painters who signed their names, this is the first such record that has been published, and students are indebted to its author for the saving of much time and labour.

Potters and painters are arranged alphabetically, the latter including nameless potters who have been distinguished by the character of their work, provided a

surname has been given them. This, the first volume, takes us as far as Beazley's 'Painter of the Gorgon Calyx-Krater.' Vases also are arranged alphabetically according to museum, with a supplementary index of shapes and subjects. A really consistent classification would, of course, only be obtainable if all vases could be listed under their painters and cross references given under the potters' names; since our ignorance of many of the painters makes this impossible, some form of compromise must be adopted. That chosen by Dr. Hoppin is as follows: a vase signed by both painter and potter is described under the painter; a vase signed by a potter and attributed to a painter is described under the potter. To make more clear its connection with the painter or potter in whose list it is not described, it might have been numbered with a cross reference among his works, even though this should sacrifice the principle of numbering no vase more than once.

The chronological arrangement is broken in the case of Oessinos and the Painter, who are included in Volume I. in order that they may appear immediately after their potter Euphronios; there is, however, scarcely adequate reason why the employees of this one workshop should be grouped together.

Another inevitable difficulty lies in the fact that a book which is an impartial record of opinion must necessarily record opinion of a somewhat misleading kind: in particular it cannot avoid the inaccuracy of attributing a vase to a potter when meaning the artist who worked for him. In some cases this matters less, for an attribution to 'Brygos' may stand for an attribution to the Brygos painter; but when we hear of vases assigned to Euxitheos we should be grateful for a note explaining why the cup Louvre G 34 was given to him rather than to his painter Otes, and warning us as to the nature of the two attributions which follow. The author himself leaves a slightly confused impression when he says, with regard to Chachryllion, 'it is quite possible that the various signed vases are the work of several different hands,' and proceeds to discuss, without deciding, 'the Chachryllion painter.'

With the vases catalogued under their painters it is a more easy matter. The lists of attributed vases are very comprehensive and of great use: where the same vase has been attributed to more than one painter, Dr. Hoppin uses his own discretion in choosing where it shall be placed, and we welcome this as one of the few occasions on which he may express his own views. Among the anonymous painters the majority consist of those newly described in Beazley's *Attic Red-Figured Vases in American Museums*. Each vase is accompanied by an excellent bibliography which could only have been improved if the authorities responsible for attributions had been indicated in every case instead of only in particular cases. An illuminating account of how the study of red-figured vases has developed will be found in the introduction.

No pains have been spared to make the illustrations as complete as war conditions would allow, and we are indebted to Dr. Hoppin for publishing several cases for the first time: among these are the kotyle by Epiktetos in the British Museum, the Egektene kylix in the Louvre (G 6), with an interesting border round the interior, and the Gades lekythos in Boston. Individually the illustrations are of unequal value: while many are from photographs and from the best reproductions, some could only be obtained from reproductions of an inferior nature. Collectively they are invaluable, and had this book done no more than illustrate the series of signed vases it would have supplied one need to which we had become hopelessly resigned.

A Handbook of Greek Vase Painting. By MARY A. B. HARFORD, M.A. pp. xii + 126. 11 plates, 21 figures in text. [Publications of the University of Manchester, No. CXXII.] Manchester University Press; Longmans, Green & Co., 1949. 9s. 6d. net.

The production of a handbook both compact and readable is something of a problem, and Miss Harford may be congratulated on its solution. The book is principally an

introduction to Greek vases destined both for the non-archaeological reader and for the student who may one day be a specialist; parts, indeed, will interest or please those to whom the study is already familiar. That it should appeal to the two, and even the three classes, though occasionally at mutual expense, is due to the fact that it gives first place to what is their common measure, the artistic development of vase-painting. This does not mean that it excludes the technical aspects of the subject, for the first part of the book gives descriptions of the various shapes and their employment, and one of the most lucid accounts of the manufacture and decoration of red-figure vases we have read; nor does it exclude industrial questions, for which there is a certain partiality, such as the export trade and the status of potters. The second or historical part is, however, very definitely a history of painting rather than of pottery.

The earlier vases are treated with special reference to the origin, evolution, and significance of their ornamentation. This cannot fail to be interesting, but has the disadvantage that the reader, fascinated by the process of development, may fail to get a distinct idea of the fabric itself and the qualities that make it recognisable. Applied to the red-figure style, the method is particularly successful; there is little attempt to introduce the works of each artist, which in a book of this size would only be confusing, but the better known artists appear as representatives of the several movements, which are admirably described in sections on the drawing of the body and of drapery, the use of diluted varnish for colouring and texture, etc. The attribution on p. 85 of a Judgment of Paris to the Brygos painter, presumably the *kylix* G151 in the Louvre, is noteworthy because contrary to general opinion. Any fresh discussion of black-figure vase-painting is welcome at the present time: a special point is here made of the influence, possibly somewhat overrated, of Chalcidian on Attic, and the perfecting of the various types of vase.

It is to be regretted that there is no mention of Boeotian pottery, whose persistency entitles it to a place in a book where national tendency is considered, and whose solitary success in the field of curvature is important for its own sake, and as a contrast to the Attic realism noticed on p. 97. On the other hand, the dismissal of Cyprus in a very short paragraph is consistent with the plan of the book, but unfortunate in view of the obliquity of its wares.

With regard to the illustrations: it is assumed that the reader has access to some such work as Walters' *History of Ancient Pottery* for the classic examples of each group, and Miss Herford is therefore free to describe without illustrating certain of the more famous vases, and to illustrate many classes by their less well known examples. Nearly four-fifths of the plates are devoted to Attic red-figure vases; here again, the principle is not to give the chief paintings of each artist, but rather to choose what is characteristic of a style. The plates are on the whole excellent, and include some fresh publications.

A tendency to sacrifice description to commentary is perhaps the most obvious fault. As it is no mere summary of facts, the book can afford to be in many ways arbitrary as to what it amplifies and what it omits, but we would have exchanged an excursus, such as that on the draping of divine statues, for fuller information, for instance, on the earlier period. None the less, Miss Herford's contribution is most valuable, both because it meets a want, and because it possesses individuality, a quality rare in handbooks.

Folk-Lore in the Old Testament. By Sir J. G. FRAZER. 3 vols. London: Macmillan & Co., 1919. 37s. 6d.

In these three volumes Sir James Frazer has collected in the manner with which we are familiar in his works every known legend and piece of folk-lore from all parts of the earth which will illustrate and, to some extent, explain the many survivals of primitive belief which are enshrined in the Old Testament. Beginning with the Hebrew legends of the Creation, the Fall of Man, the Flood, the Tower of Babel, and their Babylonian originals and congeners in all other lands, he goes on to the Covenant of Abraham, Samson and Delilah, etc., and by his exhaustive method of comparison enlightens

us not a little as to the universality of such stories in the mind of primitive man. There is hardly a bit of Hebrew folk lore that is not abundantly paralleled elsewhere. Primitive man reasons and speculates alike all over the world. In reading one may, of course, weary a little of the endless repetition of the customs of innumerable primitive tribes if one is not a comparative anthropologist: a little goes a long way to prove the point. But Sir James Frazer aims at giving us everything, and here is the mine into which all who are interested may dip if they are only so far inclined, or in which they may labour if they aim at knowing everything that is to be known on the subject. To all students of the Old Testament and all commentators thereon these volumes are indispensable, and many less scientific readers will gain from their study a new light as to the meaning of what they read in the Hebrew scriptures. Greek parallels, e.g., the story of Deukalion's flood, are by no means wanting. This tradition of some primitive flood in Thessaly, and Chinese traditions of floods, which are endemic in the valley of the Hwang-ho, are to be clearly distinguished from such a story as that of the Babylonian flood (equally natural in the land of the Two Rivers), which is demonstrably the actual original of the Hebrew tradition. What culture the primitive Hebrews had was naturally of Babylonian origin.

Dealing with the Tower of Babel, E-temen-an-ki, the temple of Enki at Babylon (which is not the same building as the mound of Babil, with which Sir James appears to confuse it: vol. I, p. 300), is no doubt Herodotus's Temple of Belus, but that either this or the mighty ziggurat of Borsippa (Birs Nimrud) is the actual original of the Biblical tower can hardly be proved. The tale is a record of the impression made on the minds of the primitive Hebrews by the soaring temple-towers of Babylonia, the usual mixture of wonder, envy, and thoroughly 'mazy' feeling which the childish barbarians feel when he sees or hears of the great works of a superior race. And it was naturally given a home at Babylon itself. Actually E-temen-an-ki was not very big, as ziggurats go: Birs Nimrud is far greater, and as the most prominent landmark in the neighbourhood of Babylon has naturally been identified not only in modern Jewish, but also in modern British military tradition as the Tower of Babel itself. Sir James Frazer is no doubt right in accepting the late Prof. King's criticism of Koldewey's peculiar supposition that E-temen-an-ki had only one stage instead of the several which Herodotus apparently saw with his own eyes.

**Sylloge Inscriptionum Graecarum a GENAIO DITZINGERO comita et aucto
nunc tertium edita. Vol. II. Lipsiae: apud S. Hirselium, 1917.**

The first volume of this classic of epigraphical research was noticed in *J.H.S.* xxxii. p. 127, where will be found a general account of the new edition and its distinctive features. The second follows it at an interval of two years and contains the historical documents from the Peace of Nisibis (217-6 A.D.) to the close of the Roman period, 405 in number. In the second edition the heading *Acta Romana* (beginning in 146 A.D.) covered 115 texts: it is now subdivided, and we have 32 inscriptions belonging to the period 146-31 A.D. and 172 dating from Imperial times. This leaves 141 texts dated in the first seventy years covered by the volume: again, however, there are a number of inscriptions carried forward from later sections, and in order to give as full a compendium as possible of the historical documents of the time in their chronological order, unnumbered references to the *Orientalis Graeci Inscriptiones* are inserted. It is not always easy to see why inscriptions which in the second edition were classed with those illustrating public, religious and private antiquities have been transferred to the historical section; for it is not necessarily precisely dated texts which are so treated, e.g. No. 504 in ed. 2, which appears as No. 893 in ed. 3, and several inscriptions which it would seem more natural to class with those illustrating *res sacrae* have been brought over, e.g. Nos. 650 and 667 in the second edition, now Nos. 540, 567. The Delphic inscriptions which record the sending of Athenian *theophrasti* to various *Herakleides*, again, are of religious rather than historical interest. But Pomtow, who is responsible for Delphi's contribution to the volume, was evidently allowed a free hand, and has printed a great deal of material which might have been reduced in bulk by selection.

For the sake of completeness he includes (and rightly) some Latin inscriptions, such as that on the base of the monument of L. Aemilius Paulus.

The historical interest of this volume is of course not equal to that of the first, although it is an excellent thing that the study of the later Hellenistic period, hitherto somewhat neglected, should be made easier; and the third volume, which will in some respects be the most interesting of all, is yet to come. There is no indication that this is to be followed (as report ran) by a collection of metrical inscriptions to replace Kaibel's *Epigrammata Graeca*.

The editing, it must hardly be said, maintains the standard which we expect of the *Syllage*; but we do not think that Dittenberger would have been guilty of *fulgur* (note on No. 623). There is little, however, to criticize. Pontow placed the inscription which records the epuxoarrhē of Sifris and Medion (No. 647) in 175 B.C. or thereabouts, but afterwards altered his opinion and thinks that it should be dated forty years later. His argument from a reconstructed pedigree seems inconclusive. In the commentary on No. 611 *ἀεθαίει* is explained by 'αὐθαίειν, εὐθαίειν,' with a reference to No. 521 (in Vol. I.) It should be observed that the proper meaning of this word is not *to perish*, but *to be lacking, fail to correspond with the total or roll*. The LXX examples, especially Numb. 31. 49 and 1 Sam. 30. 19, as well as the metaphorical uses, make this quite clear. That the surveys mentioned in the inscription fell into the hands of pirates is likely enough, but what is expressed is the fact of their disappearance, not their death. Further parallels to the Acclamations recorded in the note on No. 896 *ἐλάττω αἰσέπου κ.τ.λ.* may be found in P.Oxy. 41, as well as 1413 (which was not accessible to the editor). We note that Hiller von Gärtringen (Nos. 695, 679, 699) is careful to give the useful references to Mr. Tod's *Greek Alphabet*, which Pontow seems to have overlooked (Nos. 640, 614). The *Dryantianus* named in No. 885 must surely be connected with the family which later furnished a pretender to the purple with a wife, *Salpisia Dryantilla*: see *I.G.R.* 4. 660. (The later parts of *I.G.R.*, by the way, did not reach the editors.)

- (1) *A Handbook of Antique Prose-rhythm*. Vol. I., pp. 228. 1918. (2) *De Numero Oratorio Latino Commentatio*. Pp. 32. 1919. By A. W. DE GROOT, B.Litt.D., Conservator of the Library of the University of Groningen. Groningen, The Hague: J. B. Wolters.

In these two treatises we have an ambitious attempt to solve the problem of prose rhythm (or prose metre, as the author says it should properly be called) on new lines; Dr. De Groot puts himself adrift both from ancient authority and from the methods of modern research. The results arrived at by Zieliński, for example, he regards as built on sand. That Zieliński records facts cannot be doubted; but facts often assume a new aspect when regarded from a new point of view, i.e. in relation to other facts. I have much sympathy with the writer's contention that the *clausula* should be counted as part of the sentence. The results of divorcing its rhythm from the rhythm of what precedes it were pointed out in my review of Zieliński's latest work.¹ For example, take a familiar expression like *Quo me vertam nescio*. What the natural rhythm (or metre) of these words is may be seen from a line of Plautus—say *Curc.* 69 (an iambic senarius):

Quod si non affert, quo me vertam nescio.

The last four words have trochaic rhythm (after the caesura)—a rhythm indicated both by the quantities and by the accents: $\bar{\iota} - \bar{\epsilon} - \bar{\epsilon} - \bar{\iota}$. But when they appear at the end of a sentence in Cicero Zieliński treats them as containing the 'clausula' $-\bar{\iota} - \bar{\iota} - \bar{\iota}$, a double cretic (p. 32 and p. 100). This strange result is arrived at by treating the word *quo* as no part of the 'clausula' and ignoring accents in the next two words.

¹ *Der Constructive Rhythmus in Ciceros Reden* (Supplementband xii., Heft 1, of *Philologus*, 1914), reviewed in *The Year's Work for 1914*, pp. 61-65. This work is not

mentioned in the bibliography of the *Handbook* (p. 217), but it is quoted in *De Num. Orat.* p. 30.

I am, therefore, quite prepared to regard with favour a system which produces better results. The first question is, Where does a 'clausula' begin? De Groot lays down the principle that it begins immediately after a syllable whose quantity can be proved to be 'anceps' (*Handbook*, p. 38). This seems a sound principle, if accept is to be left out of account. But I do not find any means of discovering from these treatises whether the first syllable in the above sequences is anceps or not. On p. 8 of *De Nova Orat.* eleven favoured Ciceroan clausulae are given; but the sequence — — — — — is not among them. I should gather, however, from Nos. 63 and 64 in the tabulated statement on p. 37 that this sequence enjoys considerable favour in Cicero.

The tabulated statement just referred to is De Groot's chief contribution to the problem of prose rhythm. In order to find a secure basis of operations he catalogues 128 combinations of long and short syllables, these being all the possible combinations to be found in seven syllables ($2^7 = 128$), and to each series he adds an eighth syllable of indifferent quantity. Why exactly seven syllables are taken for experimenting on is not stated.¹ The first sequence is — — — — — \geq the second — — — — — \geq the third — — — — — \geq and so on. And figures are given to show how often each sequence appears in certain authors—both in the sentence as a whole and in the clausula. For Greek authors see *Handbook*, pp. 178-181; for Latin authors *De Nova Orat.*, pp. 36-38. Here we have an objective basis of facts—facts, however, which require interpretation before we can proceed to inferences as to rhythm. On this *modus operandi* I have two further remarks to make: (1) The author entirely ignores punctuation, in order to avoid 'the subjective factor' (*II*, p. 165). No doubt punctuation differs considerably in different editions of the same text. But to ignore the pauses which punctuation is intended to indicate is to rush from the frying pan into the fire. Nor do I think that this danger is eliminated by the fact mentioned by De Groot that it is *sex* more unfair to one author than to another. For if a sequence is broken into two by a stop, we have really not one sequence but two. (2) I have tried to check the author's figures at one point, and I find my results only partially in agreement with his. On p. 2 of the *Handbook* he gives the number of times that the pyrrhic (—) the amphibrach (—) and — — — and other groups appear in the first 1000 syllables of the 1st book of Theoclydus and of Phinarch's *Life of Pyrrhus*. Anyone can test these figures for himself. The discrepancies between De Groot's figures and mine must be due either to some difference of prosodical principle² or to a different way of counting up the several feet.

It is impossible in this review to go into details as to the application of De Groot's methods to particular writers. Elaborate tables are given which show many startling divergencies from views generally adopted. For example, according to De Groot, Demosthenes has only one really favoured clausula, — — — (*II*, p. 33 l.; cf. p. 220). But it must be observed that by a really favoured clausula is meant not one which occurs frequently, but one whose rhythm occurs more frequently than it does in the body of the sentence. Thus the frequent ending of a sentence in Cicero — — — \geq (e.g. *multis viciis*) cannot be called 'really favoured'; but the far less common ending — — — — — is 'really favoured,' because it is less uncommon in the clausula than in the body of the sentence. In other words, a clausula may be 'numerous' *quoniam* infrequentior.

The English of the *Handbook* is sometimes clumsy: it is a translation. And it is sometimes obscure. I cannot, for instance, understand the statement on p. 75 (lines 3-6), which seems inconsistent with what is said on the previous page. There are a good many misprints, only some of which are corrected in the list of errata.

On the whole, then, while wishing the author success in the further stages of his laborious undertaking, I hesitate to express approval of his methods or results; so far as I understand them.

E. A. B.

¹ On p. 18 we read 'On practical grounds I took 7, and added—the reason will be explained later on—as eighth.' I have not

succeeded in finding this 'later on' passage.

² On p. 14 of the *Handbook* *breves* is written as — — —

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BOSPORAN COINS.





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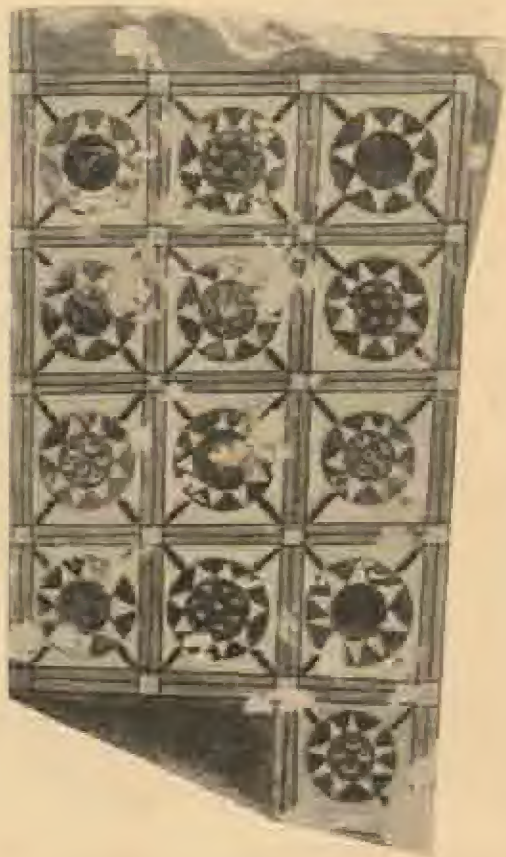




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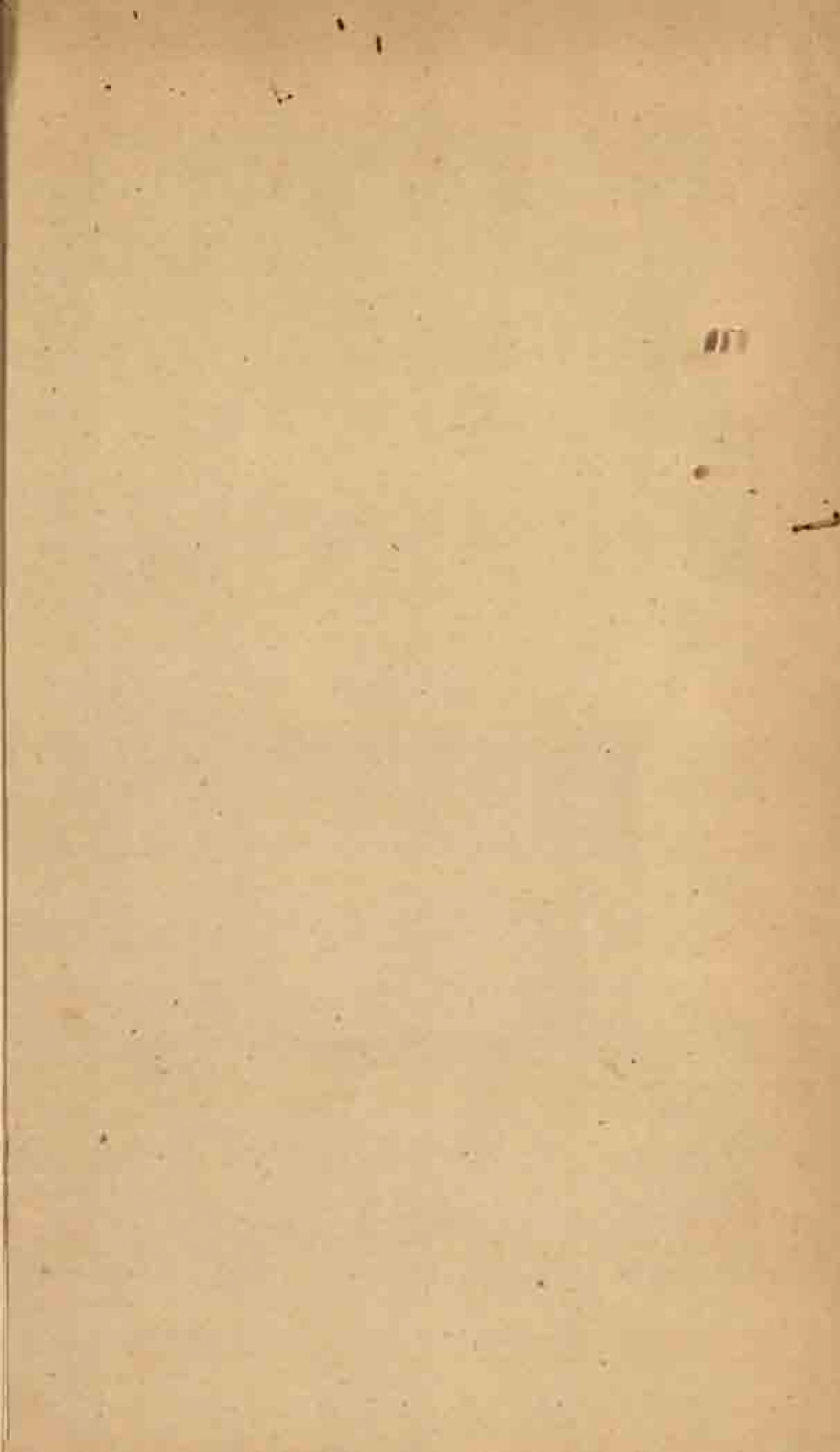
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